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Seventieth Annual Report

of the

**BUREAU OF AMERICAN
ETHNOLOGY**



1952-1953



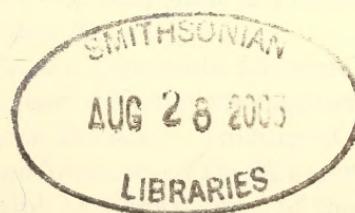
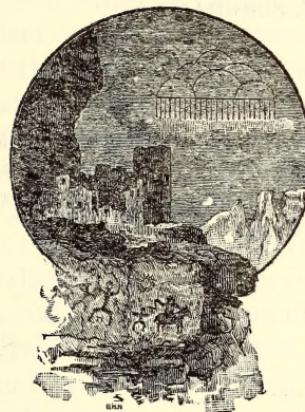
**SMITHSONIAN INSTITUTION
WASHINGTON
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SEVENTIETH
ANNUAL REPORT OF THE
BUREAU OF
AMERICAN ETHNOLOGY
TO THE SECRETARY OF THE
SMITHSONIAN INSTITUTION

1952-1953



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BUREAU OF AMERICAN ETHNOLOGY
June 30, 1953

Director.—MATTHEW W. STIRLING.

Associate Director.—FRANK H. H. ROBERTS, Jr.

Anthropologists.—H. B. COLLINS, Jr., PHILIP DRUCKER.

Ethnologist.—JOHN P. HARRINGTON.

Collaborators.—FRANCES DENSMORE, JOHN R. SWANTON, A. J. WARING, Jr.,
RALPH S. SOLECKI.

Scientific Illustrator.—E. G. SCHUMACHER.

RIVER BASIN SURVEYS

Director.—FRANK H. H. ROBERTS, Jr.

Archeologists.—PAUL L. COOPER, ROBERT B. CUMMING, Jr., FRANKLIN FENENGA,
DONALD D. HARTLE, CARL F. MILLER, JOHN E. MILLS, G. HUBERT SMITH, RALPH
S. SOLECKI, ROBERT L. STEPHENSON, RICHARD P. WHEELER.

Geologist.—THEODORE E. WHITE.

SEVENTIETH ANNUAL REPORT
OF THE
BUREAU OF AMERICAN ETHNOLOGY

M. W. STIRLING, *Director*

SIR: I have the honor to submit the following report on the field researches, office work, and other operations of the Bureau of American Ethnology during the fiscal year ended June 30, 1953, conducted in accordance with the act of Congress of April 10, 1928, as amended August 22, 1949, which provides ". . . to continue independently or in cooperation anthropological researches among the American Indians and the natives of lands under the jurisdiction or protection of the United States and the excavation and preservation of archeologic remains."

SYSTEMATIC RESEARCHES

On January 28 Dr. M. W. Stirling, Director of the Bureau, left for Panama on the fourth National Geographic Society-Smithsonian Institution archeological expedition to Panama. From February 13 to March 1 the expedition was in Darién where 2 weeks were spent on the Sambu River studying the little-known Choco Indians. The fact that their territory was opened for settlement only 2 years ago offered unusual opportunity to study the beginnings of the acculturation process. Following this, Dr. Stirling spent a month in archeological work on the islands of the Gulf of Panama, with headquarters on Taboga Island. Excavations in shell-midden sites were conducted on Taboga and Taboguilla Islands and a large burial site in a rock shelter on Urabá was investigated. He spent the first half of April on Almirante Bay in the Province of Bocas del Toro where he examined midden and cave sites and made test excavations. He returned to Washington on April 20.

Dr. Frank H. H. Roberts, Jr., Associate Director of the Bureau, was occupied most of the year with the management of the River Basin Surveys, of which he is Director. In August he went to Lincoln, Nebr., to inspect the headquarters of the Missouri Basin project, whence, accompanied by Ralph D. Brown, chief of the Missouri Basin project, and Dr. Gordon C. Baldwin, archeologist from the Region 2 office of the National Park Service at Omaha, Nebr., he proceeded to the Harlan County Reservoir project in south-central Nebraska where he visited the excavating party from the Laboratory of Anthropology of the University of Nebraska, under the direction of Dr. John L. Champe. The work at the Harlan County Reservoir was

a cooperative undertaking between the Laboratory of Anthropology and the Inter-Agency Archeological Salvage Program. While there the party examined several sites which had been excavated during the summer or were then being dug. From Dr. Champe's camp the party proceeded to Medicine Creek Reservoir, near Cambridge, Nebr., where E. Mott Davis of the Nebraska State Museum, University of Nebraska, was carrying on another cooperative project, excavating a site containing material belonging in the Early Man category. From Medicine Creek Dr. Roberts and his associates went to Denver, Colo., where they conferred with officials in the regional office of the Bureau of Reclamation. From Denver they went to Laramie, Wyo., where they examined and studied a collection of specimens from excavations carried on by Dr. William Mulloy of the University of Wyoming at the Keyhole Reservoir. The latter work was also a cooperative project. From Laramie the party went to Cody, Wyo., where it spent 2 days at the Horner site where a joint party from the Smithsonian Institution and Princeton University, under the leadership of Dr. Waldo R. Wedel and Dr. Glenn L. Jepsen, was collecting interesting new evidence on one of the early hunting groups in the Plains area. From Cody, Dr. Roberts and his companions went to Billings, Mont., to confer with regional officials of the Bureau of Reclamation about the various projects underway or contemplated in that portion of the Missouri Basin. At Billings the party was joined by John L. Cotter from the Washington office of the National Park Service. From Billings, they went to the Garrison Reservoir in North Dakota where they inspected the excavations being conducted by River Basin Surveys parties at the site of Fort Berthold II and an early historic Indian village on the top of a small butte near Elbowoods, N. Dak. The group then went on to Bismarck, N. Dak., where it examined and studied materials which had been collected by a party from the North Dakota State Historical Society at the site of the Indian village which was adjacent to Fort Berthold II. From Bismarck the party proceeded to Jamestown where the River Basin Surveys were excavating a village site and some mounds in the area to be flooded by the Jamestown Reservoir. It then proceeded to the Oahe Dam of the Oahe Reservoir near Pierre, S. Dak., where two River Basin Surveys groups were digging. One of the latter was at work in the remains of a fortified village a short distance above the dam while the other was occupied at an earlier site some miles upstream. From Pierre, Dr. Roberts and his associates went to the Fort Randall Reservoir where another River Basin Surveys party was digging in two sites. En route they stopped and inspected a site where the University of Kansas had carried on a cooperative excavation project during the earlier part of the season. From Fort Randall the group returned to the headquarters at Lincoln where

several days were spent in examining and studying collections coming in from the various field parties. At that time Dr. Roberts assisted Mr. Brown in preparing plans for the termination of the various field parties and for the fall and winter work at the laboratory in Lincoln.

Dr. Roberts returned to the field office at Lincoln in September following the accidental death of Mr. Brown, and for a period of 2 weeks took charge of the operations there, supervising the termination of the field projects and the return of personnel and equipment to the field headquarters. At that time he also reviewed and edited a number of preliminary reports on reconnaissance surveys, and approved them for mimeographing and distribution.

In December Dr. Roberts went to St. Louis to attend the annual meetings of the American Association for the Advancement of Science and gave the retiring address as chairman of Section H, speaking on the subject "Progress in the Inter-Agency Archeological and Anthropological Salvage Program in the United States." In May he attended the meetings of the Society for American Archeology at Urbana, Ill., taking part in a number of discussions pertaining to the work in the Plains area. Later in the month he went to Lincoln, Nebr., to take part in a meeting of the Missouri Basin Inter-Agency Field Committee. In January he completed a manuscript, "Earliest Men in America, Their Arrival and Spread in Late Pleistocene and Post Pleistocene Times," for the International Commission for a Scientific and Cultural History of Mankind. During the year Dr. Roberts received an alumni award from the University of Denver for distinguished service in the field of American archeology.

Dr. Henry B. Collins, anthropologist, continued his Eskimo studies and other Arctic activities. He continued to serve as a member of the National Research Council's Committee on International Relations in Anthropology and was appointed a member of the Permanent Council of the International Congress of Anthropological and Ethnological Sciences, to participate in planning for the next session of the Congress, to be held in Philadelphia in 1954.

As a member of the Board of Governors of the Arctic Institute of North America Dr. Collins attended several meetings of the Board and of the executive committee held in Montreal, Ottawa, and Washington. As chairman of the directing committee of the Arctic Bibliography, he continued to supervise the operation of this project and made arrangements with the Department of the Air Force for support of the work during the present and coming fiscal years and for the publication of the material assembled in 1952 and 1953. The Arctic Bibliography is being prepared for the Department of Defense by the Arctic Institute under contract with the Office of Naval Research. It describes, and indexes by topic and region, the contents of 24,000 publications in all fields of science relating to the Arctic and sub-

Arctic regions of America, Siberia, and Europe. About 40 percent of the material is in English, 30 percent in Russian, and the rest mainly in Scandinavian, Finnish, German, and French. The first 3 volumes of the Bibliography, of approximately 1,500 pages each, will be issued as a publication of the Department of the Army in July 1953. A fourth volume of the same size, representing the work of the past 2 years, was turned over to the printer at the end of the present fiscal year.

Dr. Collins participated in the preparation of a Program of History of America, which the Comisión de Historia of Mexico is organizing under the sponsorship of the Rockefeller Foundation. In January he attended a meeting in Havana at which plans for the program were discussed, and prepared a paper on the subject assigned to him—the Arctic Area—which summarized existing knowledge of the archeology, ethnology, physical anthropology, and history of the Eskimo and Indian tribes of the American Arctic.

On June 23 Dr. Collins and his assistant, William E. Taylor, were flown by the R. C. A. F. from Montreal to Cornwallis Island in the Canadian Arctic Archipelago to conduct further archeological excavations for the National Museum of Canada and the Smithsonian Institution. The principal objective of the work is to obtain additional information on the prehistoric Dorset culture, traces of which were found there, with Thule culture remains, by Dr. Collins and Mr. Taylor in 1950 and 1951.

The beginning of the fiscal year found Dr. John P. Harrington, ethnologist, engaged in the preparation of a study of the Abenaki Indians of Maine, Quebec, and formerly also of Vermont, who speak the nearest related living language to the extinct tongue of the Massachusetts Indians, in whose language the Eliot Bible was written. The two tongues were so closely akin that an Indian speaking one could with a little practice have understood the other. A complete treatise on the Abenaki has been assembled, including unique lists of the terms referring to their culture, and the material awaits completion of the typing to make it ready for the printer.

On December 20 Dr. Harrington proceeded to Santa Barbara, Calif., where he continued his studies of the Chumash Indians of the Santa Barbara Channel region. In 1542 the Cabrillo Expedition visited these shores, and, contrary to the custom of the time, put on record about 42 place names, nearly all of which can be identified. All the sites along the coast were visited. The coming of Cabrillo antedated that of the Pilgrim Fathers to what is now Massachusetts by nearly 80 years, and the Indian words written down are far older than any others recorded in California. During the four centuries which have elapsed since Cabrillo came, the language has evidently changed but little. Through good fortune Dr. Harrington was able to locate the

long-looked-for chapel of Saxpilil and to identify the site of the village of Coloc. On April 20, 1953, he returned to Washington.

At the beginning of the fiscal year Dr. Philip Drucker, anthropologist, was in Washington continuing his studies of Meso-American archeology. During the latter part of the summer he began preparations for an acculturational study in southeast Alaska. On September 30 he left Washington for Juneau, Alaska, where he began his investigation of the development and function of the highly interesting intertribal organization of Alaskan Indians known as the Alaska Native Brotherhood. In November he had the good fortune to be invited to attend the annual convention of this organization at Hoonah, Alaska, in the role of an observer. On the first of December he returned to Washington and began preparation of a report on the study just completed.

Shortly after the first of the year Dr. Drucker went to Mexico, D. F., where he conferred with officials of the Mexican Government and obtained the necessary permits to enable him to carry out a program of archeological reconnaissance in the Olmec area of western Tabasco and southern Veracruz. This research project was sponsored jointly by the Smithsonian Institution and the Wenner-Gren Foundation for Anthropological Research. At the end of January he departed for the field where he continued his investigations until the middle of May. He returned to Mexico City to make arrangements for the exportation of the ceramic samples collected in the course of the survey, the study of which should make it possible to identify as to culture affiliation each of the 70-some-odd archeological sites discovered and tested in the course of the trip. On June 10 he left for Washington, D. C.

RIVER BASIN SURVEYS¹

(Report prepared by FRANK H. H. ROBERTS, Jr.)

As in previous years the investigations of the River Basin Surveys were carried on in cooperation with the National Park Service and the Bureau of Reclamation of the Department of the Interior, the Corps of Engineers of the Department of the Army, and various State and local institutions. During the fiscal year 1952-53 the work was financed by a transfer of \$122,700 from the National Park Service to the Smithsonian Institution. Included were \$111,065 for investigations in the Missouri Basin and \$11,635 for all other areas where projects were underway. An additional \$50,294 in carryover of previous funds was also available for the Missouri Basin, making a total of \$161,359 for that area. The over-all total for the fiscal year, including an unexpended balance of \$3,390, was \$172,994. That amount was approxi-

¹ See article by Dr. Roberts in 1951 Smithsonian Report, pp. 351-383, for a 5-year summary of the River Basin Surveys work.

mately 26 percent less than for the preceding year and necessitated a corresponding reduction in operations.

Field investigations consisted of reconnaissance or surveys for locating archeological sites and paleontological deposits that will be affected by construction work, or are located in areas that will be flooded, and the excavation of sites that previous survey parties had observed and recorded. Following the trend of the preceding year there was much greater emphasis on excavation because the survey parties had in large measure caught up with the general program and there were fewer proposed reservoir areas requiring preliminary study. Reconnaissance parties visited 6 new reservoir basins located in 3 States. Further surveys were made in 7 reservoir areas where some preliminary studies had previously been carried on. They were in 5 different States. At the end of the fiscal year excavations were completed or were underway in 6 reservoir basins in 4 States. During the course of the year there were nine excavating parties in the field. Four of them were in areas where there had been no digging previously. The other five continued investigations at reservoir projects where work was started during prior field seasons. A paleontological party collected materials and made geologic studies in 4 reservoir basins in 3 States. By June 30, 1953, reservoir areas where archeological surveys had been made or excavations carried on since the start of the program in 1946 totaled 241 in 27 States. One lock project and four canal areas were also investigated. The survey parties have located and recorded 3,469 archeological sites, and of that number 852 have been recommended for excavation or limited testing. Preliminary appraisal reports were completed for all the reservoirs surveyed, and where additional reconnaissance has resulted in the discovery of further sites supplemental reports have been prepared. Some of those finished during the fiscal year, together with others completed toward the end of the previous year, were mimeographed for limited distribution to the cooperating agencies. In the course of the year 23 such reports were issued. The total number distributed since the start of the program is 172. The variance between that figure and the total number of reservoirs investigated is partially attributable to the fact that in a number of cases a whole series of reservoirs occurring in a basin or subbasin has been included in a single report. Other completed manuscripts had not yet been mimeographed at the end of the year. Excavations carried on during the year brought the total for reservoir projects where such investigations have been made to 42 located in 17 different States. The results of certain phases of some of that work have appeared in various scientific journals, and Bulletin 154 of the Bureau of American Ethnology, River Basin Surveys Papers, containing 6 reports, was ready for release on June 30, 1953. Detailed technical reports on 10 additional excavation projects have

been completed and are ready for publication. Paleontological surveys have been made in 121 reservoir areas. Archeological work has also been done in 88 of them and the remaining 33 will eventually be visited by archeological parties. The total of all reservoir basins surveyed, including those where archeological studies are still to be made, is 273.

The reservoir projects that had been surveyed for archeological remains, as of June 30, 1953, were distributed by States as follows: Alabama, 1; California, 20; Colorado, 24; Georgia, 4; Idaho, 11; Illinois, 2; Kansas, 10; Kentucky, 1; Louisiana, 1; Minnesota, 1; Mississippi, 1; Montana, 15; Nebraska, 28; New Mexico, 1; North Dakota, 13; Ohio, 2; Oklahoma, 7; Oregon, 27; Pennsylvania, 2; South Dakota, 9; Tennessee, 3; Texas, 19; Virginia, 2; Washington, 11; West Virginia, 2; Wyoming, 21. Excavations have been made or were being made in reservoir basins in: California, 5; Colorado, 1; Georgia, 4; Kansas, 3; Montana, 1; Nebraska, 1; New Mexico, 1; North Dakota, 4; Oklahoma, 2; Oregon, 2; South Carolina, 1; South Dakota, 3; Texas, 7; Virginia, 1; Washington, 3; West Virginia, 1; Wyoming, 2. Only the work of the River Basin Surveys or that in which there was direct cooperation with local institutions is included in the foregoing figures. Projects that were in direct cooperation with the National Park Service or were carried on by local institutions alone are not included because complete information about them was not available.

The River Basin Surveys continued to receive extensive and helpful cooperation during the year from the National Park Service, the Bureau of Reclamation, the Corps of Engineers, and various State and local institutions. Detailed maps of the reservoirs under investigation were supplied by the agency concerned and at a number of projects temporary office and laboratory rooms, as well as dwelling facilities, were provided. For survey work in Tennessee guides and transportation were furnished by the Corps of Engineers and the same source made transportation available at a series of excavations in Georgia. The work of the River Basin Surveys men was made much easier by the assistance of the field personnel of the other agencies and their accomplishments were much greater than they would have been without that help. As in other years, the National Park Service functioned as the liaison between the various agencies both in Washington and in the field. Through its several regional offices it secured information about the locations for dams and reservoirs and data on their construction priorities. The National Park Service also was mainly responsible for the preparation of estimates and justifications and procurement of funds for carrying on the program. The enthusiastic cooperation of Park Service personnel was a definite aid in all phases of the operations.

The main office in Washington directed and supervised the work in the east and south, while that in the Missouri Basin was under the supervision of a field headquarters and laboratory at Lincoln, Nebr. The materials collected by survey and excavating parties in the east and south were processed in Washington. Those from the Missouri Basin were handled at the Lincoln laboratory.

Washington office.—The main headquarters of the River Basin Surveys continued under the direction of Dr. Frank H. H. Roberts, Jr., throughout the year. Carl F. Miller and Ralph S. Solecki, archeologists, were based on that office, although Solecki was transferred to the Missouri Basin Project early in July and continued there until October when he returned to Washington. Late in November he was granted leave of absence to accept a Fulbright Scholarship for archeological investigations in Iraq. He was appointed a collaborator of the Smithsonian Institution and from March until the end of June conducted excavations financed jointly by the Iraq Government and the Smithsonian Institution.

At the start of the fiscal year Mr. Miller was in the office working on material obtained the latter part of the previous year at the John H. Kerr Reservoir (Buggs Island) on the Roanoke River in southern Virginia. During July he spent several days inspecting a site near Cambridge, Md., where a large mound attributable to the Adena culture was being destroyed by a housing development. In August he made a brief survey of the Demopolis Reservoir basin on the Warrior River in Alabama and checked on several sites in the Grenada Reservoir on the Yalobusha River in Mississippi. In October he took part in the Southeastern Archeological Conference held at Macon, Ga., and in November made all arrangements for the annual meeting of the Eastern States Archeological Federation which met in Washington. During the autumn months he completed his technical report on the excavations that he made at the Fort Lookout Trading Post site in the Fort Randall Reservoir basin in South Dakota while on loan to the Missouri Basin Project the previous year. He also finished certain revisions in the completed technical report on work at the Allatoona Reservoir on the Etowah River in Georgia. He revised a paper on Indian pottery types of Pissaseck, Va., for publication in the Journal of the Washington Academy of Sciences. Late in December Mr. Miller visited the Bluestone Reservoir on New River near Hinton, W. Va., to ascertain the exact status of the reservoir pool and what the situation was with respect to sites that had been recommended for excavation and testing when a survey was made of the area in 1948. During January and February he studied materials from his excavations at the John H. Kerr Reservoir and worked on his technical report for that project. From March 9 to June 6 he conducted excavations at four sites in the Jim Woodruff Reservoir area on the Flint

River in southern Georgia, and gave a number of talks on the River Basin Surveys program before local groups both in Georgia and northern Florida.

Dr. Theodore E. White, geologist, divided his time between the Washington office and the Missouri Basin. From November 12, 1952, to March 30, 1953, he was in Washington, cleaning, cataloging, and identifying the small mammals he had collected during the field season. In addition he identified three lots of bone from archeological sites in the Columbia Basin and one lot from a site excavated by a cooperating agency in the Missouri Basin. He completed a series of five papers on "Observations on the Butchering Technique of Some Aboriginal People" and was a joint author, with C. M. Barber, of a sixth. All have been submitted for publication in *American Antiquity*. He also finished a manuscript, "Endocrine Glands and Evolution, No. 3," for the journal *Evolution*. Two other papers, "Lithology, Distribution and Correlation of the Alachua Formation of Florida" and "Lithology, Distribution and Correlation of the Bone Valley Formation of Florida," were submitted to the Committee on the Nomenclature and Correlation of North American Continental Tertiary. Three papers by Dr. White were published during the year. They were: "A Method of Calculating the Dietary Percentage of Various Food Animals Utilized by Aboriginal Peoples," *American Antiquity*, vol. 18, No. 4, pp. 396-98; "Collecting Osteological Material," *Plains Archeological Conference News Letter*, vol. 6, No. 1, pp. 3-7; and "Studying Osteological Material," *ibid.*, pp. 8-15.

Alabama.—An archeological reconnaissance of the Demopolis Reservoir basin on the Warrior River made August 5-7, 1952, showed that although archeological remains are present in the area they would be little affected by flooding in the bottomlands. No excavations were recommended for the project.

Georgia.—During the period from March 9 to June 6, 1953, surveys and excavations were carried on along the Flint River, in southern Georgia, in a portion of the area that will be flooded by the Jim Woodruff Dam situated in the Apalachicola River, just below the junction of the Flint and Chattahoochee Rivers, in northern Florida. Carl F. Miller completely excavated 2 sites, partially excavated 2 others, and located 25 sites not previously listed by the University of Georgia when it made the preliminary survey there. One of the excavated sites, Montgomery Fields (9Dr10), was basically Weeden Island in its relationships but contained a number of traits not previously reported for that culture. The floor pattern of a fairly large rectangular structure that had been formed by individual posts, each set in its own hole, was uncovered, and outlines of a number of small circular structures suggesting the same type of construction were found. The large feature probably was a dwelling, while the smaller ones were either

sweat houses or menstrual huts. There were some 30 midden or roasting pits associated with the house remains. One dog burial was found but no human remains. Underlying the Weeden Island material was a nonceramic level characterized by stone artifacts in which projectile points were the predominant form. The latter differ from previously known types from preceramic levels in the area and may indicate a separate culture. A slightly different variant of Weeden Island culture was found at the Lusk Springs site (9Dr21), which was thoroughly tested but not completely excavated.

The second site was on the south bank of the Flint River 2½ miles east of Hutchinson's Ferry Landing. An extensive deposit of shells located there had been recorded as a single site (9Dr29) but actually proved to be two (designated A and B). Unit A was found to contain a straight Weeden Island II component, while Unit B represented a Weeden Island I component with an underlying deposit of Santa Rosa-Swift Creek materials. About 150 yards east of 9Dr29 early spring floodwaters in the Flint River exposed another small site (9Dr37). The deposits at that location were widely scattered and had very little depth. From various eroded pits and subsequent test digging, however, a series of Deptford, Swift Creek, and Weeden Island I potsherds were recovered, which makes possible the placing of the site in the cultural sequence for the area. During the course of his surveys Mr. Miller joined in the search for the historically significant location of Apalachicola Fort or Cherokeeleechee's Fort at the junction of the Chattahoochee and Flint Rivers. That town was established in 1716 by the Apalachicola when, as a result of the Yamasee war, they moved back from the Savannah River in South Carolina to the territory they had formerly occupied in southern Georgia. Their chief at that time was named Cherokeeleechee or "Cherokee Killer," and his town frequently goes by the same designation. Not many years later the group withdrew to a new location farther up the Chattahoochee. Mr. Miller tested one site tentatively identified as that of the fort but did not find evidence to support such a possibility.

During the period that Mr. Miller was working in the Jim Woodruff area Joseph R. Caldwell, archeologist of the National Park Service, was digging at a productive site on the Chattahoochee River known as Fairchild's Landing. Considerable new material was found there in a series of stratified shell deposits. Several phases of the Weeden Island culture are represented, and at one end of the site were some early historic remains. Caldwell's data and those of Miller should serve as cross checks and definitely establish all Weeden Island characteristics for the area. In the region adjacent to Fairchild's Landing Mr. Caldwell observed evidence of a possible historic Indian site which may represent one of the several "Fowl Towns" mentioned in various documents. Mr. Caldwell also took part in the search for Apalachi-

cola. Dr. Mark F. Boyd, of the Florida Historical Society, through an agreement between the National Park Service and the Society, made a historic-site survey of the whole reservoir basin, working in conjunction with Miller and Caldwell in a number of instances. Dr. Arthur Kelly, of the University of Georgia, cooperated in all the recent activities, giving Caldwell and Miller the benefit of the knowledge he obtained while making a general survey of the Jim Woodruff area in previous years. He also helped Dr. Boyd with his historic-sites investigations.

During June excavations were carried on by Ripley P. Bullen in the small portion of the Jim Woodruff Reservoir lying in Florida, under a cooperative agreement between the National Park Service and the Florida State Museum of the University of Florida. Mr. Bullen and his party dug one site near the dam, finding four superimposed occupation levels separated by sterile zones. The bottom level yielded quantities of lithic materials and definitely represented a preceramic culture. The next higher cultural layer contained sherds from fiber-tempered pottery, fragments from steatite vessels, and numerous stone artifacts. The latter, Mr. Bullen reported, constitute many times the number of previously documented worked-stone specimens from the fiber-tempered period in all Florida. The third occupation level was found to belong to the Deptford cultural horizon. The upper layer contained village remains of the Fort Walton period. Associated with that occupation were four "specialized" pits containing charred kernels of corn. The evidence from the site will be extremely important to Florida archeology because it is the first place that a fiber-tempered complex has been found *in situ* in west Florida and is only the second place where undisturbed Fort Walton village material has been available for extensive study. Investigations at three other sites produced materials that will help in filling the gap between the Deptford and Fort Walton periods at the large site. One of the three indicated a Weeden Island period and another a Kolomoki complex. That is the first time "pure" Kolomoki remains have been found in Florida.

Mississippi.—The Grenada Reservoir area on the Yalobusha River in Mississippi had been surveyed for archeological remains during a previous fiscal year by the University of Mississippi operating under a cooperative agreement with the National Park Service. Upon the completion of that survey 4 of the 51 sites found were recommended for excavation. To determine whether digging there was more essential than in some other areas, several of the sites were examined during August 25-27, 1952. It was finally decided that the meager funds available for digging might be used to better advantage in districts where less was known about the cultural manifestations, particularly so since there is a considerable number of sites in the Grenada basin that will not be affected and can be investigated at some future date.

Missouri Basin.—The Missouri Basin Project continued to operate throughout fiscal 1953 from the field headquarters at Lincoln, Nebr. Ralph D. Brown served as chief of the project from July 1 to September 7, when he died as the result of an accident. On September 22, Robert L. Stephenson, who had been on leave from the River Basin Surveys' staff, returned to active duty and was assigned to the supervision of the project, serving as acting chief throughout the remainder of the year. In the interval from September 7 to 22, Dr. Frank H. H. Roberts, Jr., was in direct charge of the Lincoln office. Activities during the year were concerned with all four phases of the salvage program. There were preliminary surveys; excavations; processing of the collections obtained from the digging, analyses and study of the materials, and the preparation of general and technical manuscripts on the results; and the publication and dissemination of scientific and popular reports. Most of the work was in the second and third phases. Much of phase 1 was finished in previous years and phase 4 will not get into full swing until more of phase 3 is completed. At the start of the year there was a permanent staff for the Missouri Basin Project of 20 persons. In addition there were 4 temporary part-time employees assisting in the laboratory. Through July and August and part of September 6 temporary assistant archeologists, 60 temporary student laborers, and 25 local nonstudent laborers were employed in the field. During the summer season 11 of the regular staff were also engaged in fieldwork. As the surveys and excavations were brought to a close the temporary employees were gradually laid off and by the first of November only the permanent staff of 20 and a temporary draftsman-illustrator were on the rolls. In May it became evident that a much more limited budget would be available for 1954 and that a reduction in force would be necessary. Consequently by the close of the day's work on June 30 the staff had been reduced to 11 persons.

On May 18 and 19 the Interior Missouri Basin Field Committee, consisting of representatives from all the agencies of the Department of the Interior concerned with the over-all Missouri Basin program, held its 61st regular meeting at the River Basin Surveys' headquarters on the campus of the University of Nebraska, at the invitation of the Missouri Basin Project and the Laboratory of Anthropology of the University. The first session was devoted to routine business, but during the evening of May 18 the members visited the Surveys' laboratory located in the business section of Lincoln and heard Mr. Stephenson explain in detail the mechanics of the field and laboratory work of the salvage program. A series of exhibits of fossil specimens, objects from historic sites, Indian-site artifacts, and methods of pottery reconstruction was used to illustrate portions of Mr. Stephenson's talk. The visitors were also shown the entire process of han-

dling materials from the time they arrive from the field until their analysis and study have been completed and the covering report has been written. Most of the session on May 19 was devoted to a presentation of the work and results of the Inter-Agency Archeological and Paleontological Program. Howard W. Baker, regional director of the National Park Service, Region 2, at Omaha, Nebr., served as chairman. Frederick H. Johnson, secretary of the independent-advisory Committee for the Recovery of Archeological Remains, sketched briefly the general background and importance of the recovery program and explained the activities and purpose of his committee. Dr. Frank H. H. Roberts, Jr., then discussed the Smithsonian Institution's part in the program as a whole, both from the standpoint of the Missouri Basin and other areas throughout the country. Dr. Gordon C. Baldwin, archeologist, Region 2, National Park Service, explained the part his organization has played, told what had been accomplished as of that date, and outlined the needs for the future in a 6-year program. Robert L. Stephenson told about the plans for the remainder of the fiscal year in the Missouri Basin and explained the reasons for the proposed projects. Dr. C. Bertrand Schultz, director of the Nebraska State Museum of the University of Nebraska, summarized the work that his institution had been carrying on as a cooperative effort in the paleontological phase of the investigations and stressed the need for such studies in a proper understanding of the Missouri Basin. Dr. John L. Champe, director of the Laboratory of Anthropology, University of Nebraska, commented on the status of archeology in the Plains area before the salvage program was started and spoke about the current activities from the viewpoint of the cooperating institutions. The historical aspects of the program were presented by Merrill Mattes, regional historian of the Region 2 office, National Park Service. He outlined the historical background for the area, described the current activities and the methods used in making the studies, and made clear the relationship between that subject and those discussed by the other speakers. As a result of the session the members of the Committee undoubtedly left Lincoln with a much better understanding of the salvage program and its aims.

During the year 10 field parties operated in the Missouri Basin. One of them made a series of extensive tests in 4 archeological sites, while 7 were primarily occupied in conducting full-scale excavations in 19 sites. In connection with that work, however, some reconnaissance was carried on in the areas where their investigations were underway. One of the parties was concerned mainly with archeological surveys and another with paleontological studies. The excavations were in 2 reservoir areas in North Dakota, 2 in South Dakota, and 2 in Kansas. The survey party operated in 5 reservoir areas in Kansas, 3 of them being covered for the first time and 2 being revisited

for further checking. The paleontological party worked in 1 reservoir area in Montana, 1 in North Dakota, and 1 in South Dakota. It also visited another project in North Dakota to examine a specimen reported from the Upper Cretaceous deposits there. During July and August 1952, 3 aerial photographic missions were flown over 12 reservoir areas. In all, 5,000 air miles were flown and 62 objectives were photographed. The latter included excavated archeological sites, sites to be excavated, dams and reservoir construction features, and the general topography of the areas to be covered by the ground surveys. The plane used was the personal property of one of the staff archeologists and the pictures were taken by the staff photographer.

The reservoir basins where reconnaissance work was carried on were: The Kirwin, on the north fork of the Solomon River, where 4 additional archeological sites were located and recorded; the Webster, on the south fork of the Solomon, where 3 were found; Tuttle Creek, on the Big Blue River, with 118; Glen Elder, on the Solomon River, with 17; and Wilson, on the Saline River, with 18. On the basis of the evidence obtained, it is apparent that no additional studies will be needed in the Kirwin and Webster areas. At Tuttle Creek, however, there is important material and 10 of the sites have been recommended for future excavation. Included in the 10 are 4 historic sites which are of special significance with respect to the early exploration and settlement of that section of the West. Of the 17 sites recorded for the Glen Elder, 6 small ones gave evidence of being extremely important because they contain materials thus far not observed in the area and they have been recommended for complete excavation. At the Wilson Reservoir 6 of the 18 sites were found to be significant from the standpoint of their relationship to one of the pre-Columbian cultures which thus far is imperfectly known. Two of the sites are caves, probably containing dry materials, and should yield types of artifacts rarely preserved in open sites. One of the recommended sites may prove to be of considerable importance because materials there are eroding from a terrace bank and appear to belong to one of the early occupations in the Plains area. Parties working in the Fort Randall Reservoir basin in South Dakota located 2 new sites, while those operating in the Oahe basin in the same State found 180. At the Jamestown Reservoir in North Dakota 3 new sites were found. The total of new sites observed and recorded in the Missouri Basin during the fiscal year was 339.

In the Garrison Reservoir basin on the main stem of the Missouri River above Bismarck, N. Dak., 2 field parties conducted archeological excavations in 3 of the 147 known there. During July and August and part of September one party dug in the remains of Fort Berthold II. The work at that location falls into the historic category, but it



Remains of Indian village on top of Night-Walker's Butte in the Garrison Reservoir Area, N. Dak. Traces of 27 earth lodges and surrounding palisade were uncovered at that location by River Basin Survey's operations.



Aerial view of the excavations of the River Basin Surveys at the site of Fort Berthold II. Locations of bastions at two diagonally opposite corners of the palisade are clearly shown. Dark strip across center of enclosure indicates area still to be excavated when photograph was made. Field party camp in upper right corner of picture.

is important because the fort was established in connection with the large Mandan-Hidatsa-Arikara village, called **Like-a-Fishhook**, which was occupied from about 1845 to 1890. The remains of the Indian village were studied by parties from the North Dakota State Historical Society under a cooperative agreement with the National Park Service, but much information was needed with respect to the fort and the evidence it might contain bearing on the relationships between the Indians and the Whites. Fort Berthold was originally built in 1858 as a trading post and was known as Fort Atkinson. Its name was changed in 1862, and from 1863 to 1867 it served as a military post. Later it became the agency for the three tribes living in the adjacent village. While there is fairly extensive documentary evidence about the military and trading post, there are many gaps in the record and the archeological excavations contributed information which will help to complete the story of the activities there. About 75 percent of the fort, including the stockade line and two bastions, was excavated. Plans call for further work there during fiscal 1954.

In July and August one party excavated the site of a fortified village on the top of a small butte on the north bank of the Missouri about 10 miles above Fort Berthold. The site is known by the name **Night-Walker's Butte** in the Bull Pasture because there is an Indian tradition to the effect that a Hidatsa chief by the name of **Night-Walker** broke away from the main tribe and led his band to the top of a butte where he built a village. Two other sites in the area are also in somewhat similar locations, and which of the three actually was the **Night-Walker** village is open to question. Nothing found during the excavations throws any light on the problem. The floor areas of 27 earth lodges were uncovered; 29 fire pits, 26 cache pits, 10 roasting pits, and 2 sweat lodges were dug; and approximately three-fourths of the stockade which encircled the edge of the butte was traced. Materials found there suggest that the village was built about or shortly before 1800. The excavations were completed and the detailed technical report on the results was well in progress at the end of the year.

In September the party that worked on the butte investigated the remains of an earth lodge across the river from the village site. It was called **Grandmother's Lodge** and was the traditional dwelling place of one of the Mandan or Hidatsa supernatural beings who was believed to be the patroness of gardens and crops. The ceremonial lodge, which was only partially excavated, appears to have been rectangular in floor plan and may be older than any other lodge thus far reported for that area. At least one additional lodge and probably several others are present at the site and further work is planned for it during fiscal 1954. That particular location provides an excellent opportunity for comparing evidence obtained through archeo-

logical investigations with the legendary story which is a part of the myths of the Indians in that district.

At the Jamestown Reservoir on the James River in eastern North Dakota one field party continued excavations started toward the close of the previous year. By the end of the season in September it had dug in 5 of the 28 known archeological sites which will be flooded by that reservoir. Two of the sites were burial mounds attributable to the Woodland culture, one was a campsite consisting of a series of boulder-lined depressions strung along the crest of a low bluff, one was a burial pit exposed by a power shovel in the borrow area directly west of the dam, and the other comprised the remains of an Indian village. The floors of four circular houses and a small sweat lodge were uncovered at the latter location. The site covers more than 2 acres and only about 10 percent of it was investigated. A few metal objects and the potsherds found there suggest that the village had Mandan affiliations or at least trade relations with that group and that it was occupied during the first half of the eighteenth century.

In the Oahe Reservoir Basin in South Dakota two parties continued investigations started toward the end of the preceding fiscal year. Excavations were carried on in 4 of the known 318 sites in the basin. At the Black Widow site (39ST3), the location of an extensive earth-lodge village of many scattered houses, about 30 miles upstream from the dam on the west side of the Missouri, evidence of two occupations was found. One period was prior to contact with the whites and the other was during the eighteenth century. During July, August, and September numerous cache pits, a refuse mound, and extensive areas of village surface were dug and four house floors were cleared. Three of the houses belonged to the early period, while the other was of the later occupation. The fourth house was superimposed upon cache pits of the early occupation. All four houses were circular in outline but there were conspicuous architectural differences between the three older examples and the one late form. Materials from the site suggest that the older level had its closest affiliations with the Myers site (39ST10), where the South Dakota Archeological Commission did some excavating in 1949, and with one of the three components in the Cheyenne River site (39ST1), which was partially excavated by a Missouri Basin Project party in the summer of 1951. The later period of occupation appears to be Arikara, although historic documentation for the site seemingly is not known. The same party exhumed a single flexed burial which was about to be destroyed by erosion at a multicomponent site (39ST23) not far from the Black Widow site. Part of the skeleton was missing and there were no mortuary offerings accompanying it.

The second excavating party concentrated its efforts in the immediate vicinity of the dam. It completed excavations started at the

Indian Creek site (39ST15) the previous year, made a series of tests at the Mathison site (39ST16), and did extensive digging at the Buffalo Pasture site (39ST6). At the Indian Creek site, which lies on the line of the proposed discharge channel for the Oahe Reservoir, two house floors were cleared. One, probably a ceremonial structure, was 50 feet in diameter. It contained a raised earthen platform or altar, covered with mud plaster, along the wall opposite the entry-way. Beside the altar was a buffalo-skull shrine. Only about 1 percent of that site was excavated, but since it was evident that there would be some delay in the construction of the discharge channel, further efforts were deferred until a later field season. The Mathison site, also on the line of the discharge channel, is stratified and the tests showed it contains data on several different Indian periods. In addition it probably was the location of Fort Galpin, one of the frontier posts. Most of the activity during July, August, and early September was at the Buffalo Pasture site 1 mile upstream from the right wing of the dam on the west bank of the river. A large fortified earth-lodge village had been located there. Four earth lodges, the cross section of the defensive ditch or moat, and over 210 linear feet of the palisade wall inside the moat were excavated. One of the lodges proved to be a ceremonial house and contained an excellent example of an altar with bison-skull offerings. Although only about 8 percent of the site was excavated there was an unusually large yield of artifacts. Included in the materials are over 100 restorable pottery vessels, which is a rare find so far as the Plains area is concerned. The material and information from Buffalo Pasture rounds out and helps to clarify that obtained from two sites, Dodd (39ST30) and Phillips Ranch (39ST14), between it and the dam which were dug during previous seasons.

While the River Basin Surveys parties were working in the Oahe area in the summer of 1952 the South Dakota Archeological Commission and the W. H. Over Museum of the University of South Dakota carried on excavations at the Thomas Riggs site (39HU1) under a cooperative agreement with the National Park Service. On two previous occasions the W. H. Over Museum had worked there but had not completed its investigations. During the 1952 season its party, under the leadership of Dr. Wesley R. Hurt, Jr., excavated the remains of five houses and dug a long trench through the village area. Evidence found there indicates that the village was occupied at about A. D. 1500 and that it probably did not have more than 200 inhabitants at any one time. Just what the relationship between it and later Arikara or Mandan communities may have been is still to be determined.

The two parties, one for Indian and one for historical sites, working in the Fort Randall Reservoir basin continued the operations started toward the end of the preceding year. During the field season excava-

tions were carried on in 6 of the 53 known sites which will be inundated. At the start of the year the Indian-site party was centering its activities in village remains where considerable digging had been done the previous field season. At that location, the Oldham site (39CH7), there was evidence for three periods of occupation. The latest was an earth-lodge village with palisade and moat where most of the digging was done during the 1951 season, the middle period was an earth-lodge village with a palisade but no moat, and the earliest was an occupation level underlying both of the others. At the start of the 1952 field season, in May, activities were centered on the portion of the site representing the middle period. Beginning with the new fiscal year attention was turned to the area where there was some overlap between the remains of the last two periods. During the course of the digging 2 earth lodges, 3 drying racks, 2 infant burials, 270 feet of stockade, including 1 bastion, 76 pits, most of which were cache pits, and numerous fire pits were uncovered. Tubular copper beads were found in one of the infant burials. The specimen yield from the site was great and study of the material shows that when the results are completely tabulated there will be much new information about the material culture of the people who inhabited that area. The middle period apparently correlates with what is known as the Great Oasis Aspect in Minnesota. Although less than half of the site was excavated, sufficient data were obtained to warrant stopping the work in August and moving the laborers to a new location. The latter, the Hitchell site (39CH45), consisted of the remains of a semipermanent village characterized by circular, hutlike, pole-framed structures which probably were covered with skins or brush. The site was stratified and preliminary analysis of the materials from it indicates that it was related to the latest and the earliest periods at the Oldham site. While work was underway at the Hitchell site some of the laborers, under the supervision of a field assistant, dug 1,698 feet of test trenches at the Pease Creek site (39CH5) several miles downstream. The evidence revealed by the trenches shows that there were two occupations. The latest was by a group using the location mainly as a camping area, while the earlier presumably had a more permanent type of settlement. Pottery found there suggests Upper Republican and Nebraska cultural influences. The artifact complex as a whole is unique in the Fort Randall area. During the summer season additional testing was carried on at a campsite (39CH51) where some digging had been done during a previous year. Those investigations completed the studies at that location. The activities of the Fort Randall Indian party were brought to a close in late September.

During July the historic-site party completed the excavation of the Fort Whetstone site (39GR4) on the west bank of the Missouri River near the mouth of Whetstone Creek. The palisade was traced

and the outlines of the buildings that stood inside the fortification were followed. Exact dimensions of the fort and buildings were obtained, as were some of the constructional features of the interior of the buildings. All wooden structures had been burned, and evidence indicates that the post was destroyed shortly after abandonment in 1872. About 90 percent of the site was excavated and no additional work will be required there. A number of discrepancies found between the various features revealed by the digging and a plan of the fort drawn in 1871 raised a number of puzzling historical problems. About 500 yards northwest of the fort the remains of a "Missouri Dugout" were found and excavated. At the end of July the party moved to the Fort Randall site (39GR15) on the west bank of the Missouri River half a mile southeast of the Fort Randall military post. Work there showed that the remains were those of a brick kiln, which probably belonged to the period of Fort Randall I. The remains of the kiln and features associated with it were completely excavated and the party left the Fort Randall Reservoir area at the end of August, proceeding to the Kirwin Reservoir in Kansas.

During the 1952 field season work was also carried on in the Fort Randall area by the Nebraska State Historical Society and the University of Kansas under cooperative agreements with the National Park Service. The Historical Society party under the direction of Marvin F. Kivett continued excavations in two sites (39LM26 and 39LM27) located along the highway a short distance east of Oacoma and about 2 miles west of Chamberlain, S. Dak. Some digging was also done at a site (39LM81) 10½ miles upriver from Chamberlain. The work at the first two locations, which was completed, showed evidence of a historic Siouan occupation underlain by an earth-lodge village belonging to what has been called the Fort Thompson focus. The third site was found to have three components, historic Siouan, a level producing a simple-stamped type of pottery which has not yet been culturally correlated, and an earlier Woodland occupation. The University of Kansas party under Dr. Carlyle S. Smith spent a third season at the Talking Crow site (39BF3) about 3½ miles below Fort Thompson, S. Dak. During the three seasons at the site 9 houses were completely excavated, 4 were partially excavated, and 14 were tested to obtain their dimensions and samples of materials from them. Stratigraphic tests were made in three refuse mounds, trenches were dug across the surrounding fortification on four sides of the site, two long trenches were cut through areas between the houses, and numerous other test pits and trenches were dug. From the data obtained it appears that the site had four components. The latest was Siouan dating from shortly after the Civil War. Prior to that was the last occupation by earth-lodge-building people, probably the Arikara, during the period when European trade goods were beginning to

appear in the area. Preceding that was an occupation which just antedated the introduction of trade goods. The earliest occupation was definitely prehistoric in age and its cultural affinities seem to have been widespread. The latest component appears to correlate with one phase of Kivett's Oacoma sites and with the Indian Creek site in the Oahe area. The one just preceding seems to equate with an older phase at Kivett's sites and with the latest component at the Oldham site. The next to the oldest component correlates with the older level at the Black Widow site in the Oahe area, but there is still some question as to the relationship of the first occupation at Talking Crow.

In the Kirwin Reservoir basin in Kansas the historic-sites party, which had moved from the Fort Randall area, spent the period from September 2 to 20 excavating the remains of Camp Kirwan, an old frontier post located on the right bank of the Solomon River in Phillips County. The site (14PH6) was completely excavated and the palisade line was traced as an intrusive trench in the soil.

An archeological party spent 3 weeks in June 1953 testing sites at the Tuttle Creek Reservoir in Kansas. During that period work was carried on at four sites; three of them were in the spillway construction area, and one in the general construction area for the dam. Two of them had been severely damaged by the cut for the spillway, while the others were in immediate danger of destruction by further activities. One of the sites in the spillway line (14PO14) was an earth and stone mound approximately 26 feet in diameter with a maximum height of 1½ feet. The mound contained a burial pit with skeletal remains occurring at two levels. The original interment of at least three bodies apparently had been dug into to make room for subsequent burial of three, possibly four, more bodies. In both levels there was one articulated skeleton in a semiflexed position. Stone implements, copper beads, and fragmentary bits of copper sheeting were found with the bones. At some distance from the pit the remains of an extended burial without a skull were found. It had no accompanying mortuary offering. Indications were that the skull had been removed by some earlier digger and also that the interment was a later intrusion in the mound. In general appearance the mound suggested relationship to others in the Tuttle Creek, Glen Elder, and Wilson Reservoir basins. They have not as yet been assigned to any culture but may well have Woodland affiliations. The extended burial possibly is attributable to the Kansa, as it had certain similarities to others found elsewhere which presumably were made by that tribe. Furthermore, materials collected from two occupation areas nearby indicate a late occupancy, and since a historic Kansa village is known to have existed in the immediate area it seems likely that they may also have lived at those locations. As a matter of fact, the two sites (14PO12 and 14PO13)

may represent parts of a single large occupational area as one is on the eastern edge of the spillway and one is on the western edge of it and both have been extensively damaged by construction activities. Materials collected during the digging there consist of buff-colored potsherds with gray shell-tempered paste and punctated decorations, small triangular-unnotched projectile points, an abundance of stone scrapers, a conical copper bangle, and some bits of sheet metal. The fourth site tested (14RY10) is on the west side of the Blue River. It was buried under considerable flood-borne silt but the exploratory trenches indicated the former presence of an earth lodge and other village features. Potsherds from the house area suggest that a cultural transition was underway at that location. It was not possible to do any extensive digging there, but at the end of the fiscal year plans were being made by one of the local institutions to continue the investigations as a cooperative effort. It was necessary for the River Basin Surveys party to close down its work on June 26 and return to the headquarters at Lincoln.

The paleontological field party completed its activities at the Keyhole Reservoir in Wyoming on July 1, 1952, and left the following day for the Canyon Ferry Reservoir in Montana. En route, at the request of the National Park Service, it visited the South Unit of the Theodore Roosevelt National Monument to examine some paleontological material found in that area. From July 5 to August 3 the party explored exposures of the Oligocene and Miocene deposits in the Canyon Ferry Basin. Some 75 specimens of small mammals were collected, adding greatly to the knowledge of certain groups, particularly the rabbits and small dogs of the Miocene. During the period the paleontologist also identified the Tertiary sediments in a number of localities in the Toston Basin for a mapping party of the United States Geological Survey. From August 9 to 30 the party explored the exposures of the Paleocene Fort Union formation in the Garrison Reservoir near Elbowoods, N. Dak. Specimens are exceedingly rare in that formation, and because of the uncertain correlation of the deposits the value of those found is materially increased. During that period the nearly complete skeleton of *Champsosaurus*, an alligatorlike aquatic reptile, was collected. Exposures of the Oacoma member of the Upper Cretaceous Pierre shale in the vicinity of the Oahe Dam were explored from September 2 to 10. A number of specimens of marine reptiles were found but they had been exposed too long to be worth collecting.

The paleontological party returned to the field in June, and from June 1 to 7, 1953, at the request of the National Park Service made a paleontological survey of certain areas in the Badlands National Monument. From the 9th to the 27th it continued explorations of the Oligocene and Miocene deposits of the Canyon Ferry Reservoir area.

Initial flooding of the reservoir made it necessary to visit several localities by boat. About 100 specimens of small mammals, rabbits, rodents, and marsupials were obtained. Of special interest is a very small rabbit, details of the teeth of which suggest that it may be ancestral to the cony or pika, the tiny rock rabbit which lives high in the mountains. If such should prove to be true these are the earliest known specimens of that group of rabbits found anywhere in the world. The Canyon Ferry Reservoir basin, which will not be available for study another season because of the impounded water, has been the most productive, both in the number and variety of species, of any locality in the area and is the only one thus far that has produced a sizable Middle Oligocene fauna in the Intermountain Basins. On June 27 the party moved to the Fort Peck Reservoir in Montana for the purpose of examining a plesiosaur (marine reptile) skeleton found in the Upper Cretaceous Bear Paw shale by a member of the Fish and Wildlife Service. At the end of the year the party was at Fort Peck.

During the year 18 preliminary appraisal reports were completed, mimeographed, and distributed to the cooperating agencies. One supplemental report, on the Fort Randall Reservoir, was completed and ready to mimeograph. Fourteen short articles on specific subjects in Plains archeology were completed and printed in various publications. Six appeared in the Plains Archeological Conference News Letter; four in the Proceedings of the Nebraska Academy of Sciences, 63d annual meeting; one in American Antiquity; one in the Americana Annual; and two in the Missouri Basin Progress Report, issued monthly by the Interior Missouri Basin Field Committee. Thirteen additional articles were completed and had been accepted for publication by various journals. Nine reports were completed and were ready to submit for publication. They included three technical papers on excavations in the Garrison Reservoir area, one on an excavated site in the Oahe area, one on historic sites dug in the Fort Randall basin, one on excavations in the Kirwin Reservoir, one general paper on the subject of articles of white manufacture as exemplified by the materials from various sites in the Missouri Basin, and two on work in the Northwest done by a member of the staff prior to his joining the Missouri Basin Project.

The laboratory at Lincoln processed 161,036 specimens from 339 sites in 9 reservoir areas and 1 unassignable site. A total of 22,570 catalog numbers was assigned to the series of specimens. The work in the laboratory also included: Reflex copies of record sheets, both negatives and prints, 12,629; photographic negatives, 2,281; photographic contact prints, 11,474; enlargements, 5" x 7" to 20" x 24", 4,082; photographs mounted for files, 6,874; transparencies mounted in glass, 1,132; drawings, tracings, and maps, 126; specimens drawn for

illustration, 504; completion of restoration of pottery vessels, 32; vessels or rim sections restored, 84.

Temporary interpretative displays showing the scope and results of archeological investigations in the Missouri Basin were installed in the windows of the laboratory in the business section of Lincoln in November 1952, and in the windows of a large Lincoln department store in February 1953. A special display illustrating and interpreting the archeology of the Oahe Reservoir area was installed for the Corps of Engineers by the Missouri Basin Project in the registration building for visitors at the Oahe Dam observation point. Special archeological and paleontological displays were prepared for the meetings of the Interior Missouri Basin Field Committee held at the headquarters and laboratory in May.

Paul L. Cooper, consulting archeologist, was in charge of one excavating and survey party in the Oahe Reservoir basin from July 1 until October 16. He supervised the digging at the Black Widow site and toward the end of the season participated in the reconnaissance work. During the fall and winter months in the laboratory he correlated the records of the Oahe reconnaissance with previous records, summarized information from published and unpublished sources of varied nature, made use of data obtained from excavations by the Missouri Basin Project and other agencies, and prepared "An Appraisal of the Archeology of the Oahe Reservoir." He also worked on a summary report of the activities of the Missouri Basin Project during the calendar years 1950 and 1951. This is concerned with investigations in 42 reservoir areas, the work of 2 full-season survey parties and other shorter-term parties, the activities of a paleontological party during 2 field seasons, and the excavations carried on by 12 full-season parties in Indian and historic sites in 6 different reservoir basins. The specimens obtained from the Black Widow site received preliminary study and a provisional classification was made of the pottery found there. Mr. Cooper participated in the Tenth Conference for Plains Archeology at Lincoln in November and attended the sessions of the Society for American Archeology at Urbana, Ill., in May.

Robert B. Cumming, Jr., archeologist, was in charge of the Indian-site excavations and survey in the Fort Randall Reservoir area in South Dakota from July 1 to September 26. He supervised the digging at the Oldham, Hitchell, and Pease Creek sites. During the months at the laboratory in Lincoln he made analyses of the material and data obtained during the 1951 and 1952 seasons at the Oldham site and prepared a technical report on the results of his investigations at that location. In addition he completed a supplementary report for the previously issued "Appraisal of the Archeological and Paleontological Resources of the Lower Platte Basin," and finished the first

draft, with an accompanying map showing the location of all sites found to that date in the reservoir area, of a supplementary report on the Fort Randall basin. From June 10 through 17, 1953, he supervised the work of the excavating party in the Tuttle Creek Dam area in Kansas. Mr. Cumming presented a résumé of the 1952 field work at the Tenth Conference for Plains Archeology in November.

From July 1 to September 15 Franklin Fenenga, archeologist, was in charge of an excavating party in the Oahe Reservoir area and also took part in additional surveys in the general vicinity of the dam. He directed the digging at the Buffalo Pasture, Mathison, and Indian Creek sites. In August he installed a special display to interpret the archeology of the Oahe Dam area in the observation building maintained by the Corps of Engineers at a spot overlooking the east wing of the dam. During the remainder of the year, at the Lincoln headquarters, he completed appraisal reports on the archeology of the Gavins Point Reservoir in Nebraska and South Dakota and for the Middle Fork Reservoir in Wyoming. He also completed a detailed technical report on the results obtained at the Indian Creek site and had finished approximately 75 percent of the report on the Buffalo Pasture Village by the end of the fiscal year. He presented three papers on archeological field methods before the Seminar on Plains Archeology at the Laboratory of Anthropology of the University of Nebraska. He took part in the Tenth Conference for Plains Archeology and was reelected to a third term as editor of the Plains Archeological Conference News Letter by that group. He presided as president at the anthropological section of the 63d annual meeting of the Nebraska Academy of Sciences and presented a paper, "The Ice-Glider Game, an 18th-Century Innovation in Northern Plains Culture." He also prepared an article, "The Weights of Chipped-Stone Projectile Points, a Clue to Their Functions," for publication in the Southwestern Journal for Anthropology. While in the field he addressed several organizations, telling about the work of the River Basin Surveys, and during the months in Lincoln acted as preceptor of the Indian Project of two groups of Campfire Girls. Because of the curtailment of funds for the Missouri Basin Project it was necessary to terminate Mr. Fenenga's appointment in a reduction-in-force action on June 30, 1953.

During July, August, and early September Donald D. Hartle, archeologist, was in charge of the excavations at the Night-Walker's Butte site and Grandmother's Lodge in the Garrison Reservoir area. In September he also measured and photographed a modern dance lodge in the Santee Bottoms. Throughout the remainder of the year he was at the Lincoln headquarters where he completed the detailed technical report on the excavations, carried on during 2 previous years at the Rock Village site (32ME15). He completed a series

of notes on the work at Night-Walker's Butte, the Grandmother's Lodge, and the dance lodge, and presented a summary report on his summer's work at one of the sessions of the Tenth Conference for Plains Archeology. As a result of the reduction in force, made necessary by curtailed funds, Mr. Hartle's employment was terminated on June 30, 1953.

George Metcalf, field and laboratory assistant, was a member of the Fort Berthold excavating party in the Garrison Reservoir area from July 1 to September 26, 1952. In addition to taking an active part in the digging at the fort he spent several days guiding the paleontological party to exposures noted during the previous year's surveys and in checking on the location of archeological sites reported by local residents. Mr. Metcalf also assisted in the investigations at the Grandmother's Lodge site. After returning to the Lincoln headquarters he prepared the material from Fort Berthold II for cataloging, made an analysis of the artifacts from the Night-Walker's Butte excavations, studied and prepared descriptions of specimens from the Star Village site (32ME16) dug the preceding year, and started work on a description of the remains of the last Arikara earth lodge, a task at which he was engaged until the end of the fiscal year. During the winter he also prepared book reviews for the North Dakota Historical Quarterly and for Nebraska History. Mr. Metcalf's employment was terminated on June 30 through the reduction-in-force program, but on July 1 he was to take a position as a museum aide in the division of archeology, United States National Museum.

On July 1, 1952, John E. Mills, archeologist, was occupied with an excavating party at the site of the Whetstone Army post in the Fort Randall Reservoir area in South Dakota. He completed that work on July 25 and moved his party to the Fort Randall brick-kiln site where he dug until August 29. During August he also made a reconnaissance, visiting the sites of the Lower Brule Indian Agency, Fort Lower Brule, and Fort Hale for the purpose of planning possible future excavations at those locations. In September he took his party to the Kirwin Reservoir area in Kansas and dug the site of Camp Kirwan. From October through June Mr. Mills was engaged at headquarters analyzing materials and preparing reports on the results of his investigations. He completed technical papers on "Historic-Sites Archeology in Fort Randall Reservoir, South Dakota," and "Excavation at Camp Kirwan, Kansas." In addition he completed manuscripts on the results of work which he did before joining the staff of the Missouri Basin Project. They were: "Quantitative Analysis of a Columbia River Shell Mound," and "Cultural Continuity at Nootka Sound, Vancouver Island." In September he addressed the Kirwin High School on the subject "Smithsonian Institution River Basin Surveys" and in May presented a paper, "Ethnohistory," before

the Nebraska Academy of Sciences. Mr. Mills requested leave of absence in May to return to the University of Washington to complete his studies for an advanced degree in anthropology. Such was granted, but in the reduction-in-force program it was necessary to remove his name from the rolls as of June 30.

At the start of the fiscal year J. M. Shippee, field and laboratory assistant, was at the headquarters in Lincoln. He spent several days assembling data for use in making an aerial survey and on July 15 and 16 flew with Ralph S. Solecki over five reservoir areas in Kansas. On July 23, under the general direction of Mr. Solecki, he started a ground survey of the Tuttle Creek Reservoir and was in that area until September 8. From that date until October 4 he assisted in the survey of the Glen Elder, Kirwin, Webster, and Wilson Reservoir basins. On his return to the laboratory he helped to complete the survey sheets and maps for the 156 new sites found, aided in the analysis of specimens, the identification of photographs, and the preparation of exhibits. He wrote an outline summary of the results of Solecki's work for presentation at the Tenth Conference for Plains Archeology. In November he also gave an illustrated talk before the Kansas City Chapter of the Missouri Archeological Society. On June 10, 1953, Shippee went to the Tuttle Creek Reservoir as assistant to Mr. Cumming and after the latter's return to Lincoln on June 17, was in charge of the excavating party for the remainder of the project. Mr. Shippee's employment was terminated by the reduction in force on June 30.

G. H. Smith, archeologist, was in charge of the party digging at the site of Fort Berthold II on July 1 and continued to supervise those excavations until the end of the season on September 23. Returning to the headquarters at Lincoln he spent the time from September 26 to June 30 working over materials and writing reports on his field-work. He completed the detailed technical paper on the results of the investigations made during a previous year at Fort Stevenson in the Garrison area. He also finished a brief report on the excavation of Fort Berthold II intended primarily to indicate progress at the site as of the end of the fiscal year. A manuscript consisting of a descriptive account of glass beads, some 8,000 in number, recovered at Fort Berthold was written and accepted for publication by the Central Texas Archeologist. A summary account of the history of the Niobrara River Basin was prepared for submission to the Bureau of Reclamation for use in the revision of the Niobrara Basin report of that Bureau's Region 7 office. At the Tenth Conference for Plains Archeology Mr. Smith reported on the work at Fort Berthold II and also presided as chairman at a session devoted to Plains Ethno-history. Mr. Smith resigned, effective June 19, to attend the American School of Research, Athens, Greece.

Ralph S. Solecki, archeologist, was transferred to the Missouri Basin Project early in July. During the period from then until October 4 he was in charge of the surveys of the five Kansas reservoirs and in July and August flew three aerial photographic missions over other Missouri Basin areas. After completing the aerial missions Mr. Solecki prepared an article, "Photographing the Past," which appeared in the September issue of the Missouri River Basin Progress Report. While at the Lincoln office during the latter part of October and early November appraisal reports on the five Kansas Reservoir surveys were completed by Mr. Solecki.

Robert L. Stephenson, acting chief of the Missouri Basin Project, devoted a major portion of his time to managing the operations of the project. However, he was able to prepare a series of summary statements on the past 7 years of Missouri Basin Project activities in detail, reservoir by reservoir. He also did extensive work on a technical report of the excavations he supervised during previous years at the Whitney Reservoir on the Brazos River, Hill County, Tex., and made some analysis of notes and materials from the Accokeek site in Maryland. He served as chairman of one section of the Tenth Conference for Plains Archeology in November, attended the annual meeting of the Society for American Archeology at Urbana, Ill., where he presented a paper, "Accokeek: A Middle-Atlantic Culture Sequence," and acted as a discussant for two other papers. He served as chairman for an informal conference of Plains archeologists held at the Lincoln headquarters in April, and was host for the meeting of the Interior Missouri Basin Field Committee meeting in May. At the end of the fiscal year he was on a tour of inspection of the Missouri Basin. While in the field he visited White's paleontological party at Canyon Ferry Reservoir in Montana.

At the start of the fiscal year Richard Page Wheeler, archeologist, was in charge of the survey and excavation party at the Jamestown Reservoir in North Dakota. He continued his investigations there until September 26 when he returned to the headquarters at Lincoln, Nebr. Throughout the remainder of the year he worked on a major technical report summarizing the results of excavations and surveys made by himself and others in the Angostura Reservoir, S. Dak., and in the Boysen and Keyhole Reservoirs in Wyoming, between 1946 and 1951. That report was virtually completed at the close of the year. In addition he prepared a paper, "Plains Ceramic Analysis: A Check-List of Features and Descriptive Terms," which was published in the Plains Archeological Conference News Letter, vol. 5, No. 2. He also wrote an interim report, "Appraisal of the Archeological and Paleontological Resources of the Jamestown Reservoir, North Dakota: Supplement," which was mimeographed and distributed to the cooperating agencies. At the Tenth Conference for

Plains Archeology in November he gave a résumé of the Jamestown investigations and read a paper on the preceramic subsistence patterns in the Great Plains. On May 1 he presented a paper on Dakota mounds and earthworks at the 63d annual meeting of the Nebraska Academy of Sciences. In the late spring he collaborated with Dr. Donald J. Lehmer on a paper, "Time Horizons in the Northern Plains."

Dr. Theodore E. White, geologist, was in charge of the paleontological field party during all its operations. As previously noted, work during the 1952 season was in the Canyon Ferry, Garrison, and Oahe reservoir areas, and in June 1953 the party returned to the Canyon Ferry Reservoir in Montana for additional collecting. From September 15 to November 6, 1952, and from April 2 to May 30, 1953, Dr. White was in the laboratory at Lincoln. During those periods he was occupied in identifying osteological material collected by the various archeological excavating parties. Dr. White's other activities were discussed in connection with the operations of the Washington office.

Cooperating institutions.—Various State and local institutions cooperated in the Inter-Agency Salvage Program during the year. Most of those activities were on the basis of agreements between the agencies and the National Park Service, but in a few cases State groups carried on independently, although correlating their efforts closely with the over-all operations. The Ohio State Archeological and Historical Society continued to assume responsibility for all reservoir areas in that State. The Indiana Historical Society included surveys of potential reservoir areas in its general program for archeological research in Indiana and made periodical reports on the results of the investigations. Institutions working under agreements with the Service and the projects undertaken were: California Archeological Survey, University of California, Berkeley, made surveys of the proposed Trinity, Lewiston, Mooney Gulch, Red Bank, Oroville, Nimbus, Ice House, Union Valley, Pilot Creek, San Luis, and San Lucas Reservoirs of California and the Humboldt River and tributaries in Nevada, and started excavations in sites in the Nimbus and Red Bank areas; the Carnegie Museum of Pittsburgh excavated in the Conemaugh Reservoir area on the Conemaugh River in Pennsylvania; the Florida State Museum of the University of Florida dug a number of sites in the portion of the Jim Woodruff Reservoir basin located in Florida; the University of Kansas continued excavations at a site in the Fort Randall Reservoir basin in South Dakota; the University of Missouri excavated in the Pomme de Terre Reservoir on the river of the same name and at the Table Rock Reservoir on the White River in Missouri; Montana State University dug several small sites in the Garrison Reservoir area in North Dakota; the Nebraska

State Historical Society worked at three sites in the Fort Randall basin, South Dakota; the University of Nebraska Laboratory of Anthropology continued excavations in the Harlan County Reservoir on the Republican River, Nebr.; the University of Nebraska State Museum made archeological excavations in the Medicine Creek Reservoir in western Nebraska, and on a volunteer basis did paleontological work in several Missouri Basin projects; the State Historical Society of North Dakota continued excavations in the Garrison area; the University of Oklahoma worked at the Tenkiller Ferry Reservoir on the Illinois River and at the Keystone Reservoir on the Arkansas River in Oklahoma; the University of Oregon excavated in sites near The Dalles Dam on the Oregon side of the Columbia River; the University of South Dakota worked in the Oahe Reservoir basin in South Dakota; the State College of Washington investigated an early site in the Lind Coulee, Wash.; the University of Washington excavated at the Wakemap Mound site on the Washington side of the Columbia in The Dalles Reservoir basin; and the University of Wyoming continued its digging at the Keyhole Reservoir on the Belle Fourche River in Wyoming.

INSTITUTE OF SOCIAL ANTHROPOLOGY

In the spring of 1952 the Institute of Inter-American Affairs, Department of State, which had made a grant to the Institute of Social Anthropology to enable it to carry on its functions from January 1, 1952, to the end of the fiscal year with the understanding that the Smithsonian anthropologists would be available for program analyses of technical aid projects, decided to utilize anthropologists on a permanent basis. A request was made that plans be prepared to transfer ISA personnel to the Institute of Inter-American Affairs on July 1 and bring to a close the ISA activities as such. Late in June 1952, however, the Institute of Inter-American Affairs extended its grant to the Smithsonian Institution for an additional 3 months, so that there could be an orderly transfer of personnel, and provided \$15,725 to finance the ISA until September 30, 1952. Before that date it became apparent that further time would be needed, and the grant was extended to December 31, 1952, and an additional \$15,725 made available. The total funds for the 6-month period were \$31,450. The activities of the Institute of Social Anthropology ended on December 31, 1952.

The period from July 1 to December 31, 1952, was one of retrenchment and the closing down of projects. In Washington Dr. Foster was occupied in terminating the work of the Institute, in the planning of anthropological aspects of the program in the Institute of Inter-American Affairs, and in the preparation of four article-length manuscripts on contemporary cultures in Latin America for publication

in anthropological journals. Dr. Kalervo Oberg, who had returned to the Washington office in June, prepared reports on the cultural problems encountered by technical aid programs in Brazil, and read and commented on Institute of Inter-American Affairs reports, as requested. He described Servicio programs in Brazil at the annual meeting of the American Association for the Advancement of Science at St. Louis, Mo., in December.

In Mexico all former Institute of Social Anthropology programs were terminated and the activities of Dr. Isabel T. Kelly were integrated with those of the Mexico City offices of the Institute of Inter-American Affairs. Her assignments, all made from that office, included trips to Monterey and Veracruz. In Colombia, beginning July 1, the work of Charles J. Erasmus was directly integrated with the Bogotá office of the Institute of Inter-American Affairs and all assignments, including program planning, routine office work, and field work in fisheries and agriculture were made by that office. Dr. Ozzie Simmons was in Peru on July 1 awaiting transfer to Chile by the Institute of Inter-American Affairs. There was unexpected delay in the shift, however, and as he had not been assigned to an Institute program in Peru he made use of the time in terminating basic field studies in the Cañete Valley which, when published, will add to the knowledge of contemporary Latin American culture and will be a useful adjunct to program planning in the Institute of Inter-American Affairs. Dr. Donald Pierson resigned his position in Brazil on June 30, 1952, and subsequently returned to the United States.

Mrs. Eloise B. Edelen, of the Smithsonian Institution editorial staff, continued to edit Institute of Social Anthropology manuscripts. Publication No. 13, "The Tajín Totonac," by Isabel T. Kelly and Angel Palerm, was released on September 22, 1952. Publications No. 15, "Indian Tribes of Northern Mato Grosso, Brazil," by Kalervo Oberg, and No. 16, "Penny Capitalism: A Guatemalan Indian Economy," by Sol Tax, were released for distribution on April 2 and June 16, 1953, respectively.

On December 31, 1952, the employment of Dr. George M. Foster, Director, was terminated through a reduction-in-force action; and anthropologists Isabel T. Kelly, Charles J. Erasmus, Ozzie Simmons, and Kalervo Oberg were transferred to the Institute of Inter-American Affairs.

ARCHIVES

An apparent increase in public interest concerning American Indians, particularly those of the West, has resulted in greater demands on the large photographic collections. For the period from March 1 to June 30, 1953, 288 prints, together with data concerning them, were furnished in response to 104 requests.

During this same period 77 manuscripts were consulted, and 12 orders for microfilm and photostatic copies were filled.

Numerous gifts of photographs and manuscripts were received during the year. New linguistic materials accessioned included a portion of a Ponca-English vocabulary and a number of hymns translated in the Omaha language. This material, prepared in 1872 by J. O. Dorsey, was presented to the Bureau by Mrs. Virginia Dorsey Lightfoot. A portion of an English-Choctaw vocabulary prepared by Cyrus Byington about 1860 was presented by Donald D. McKay. The Historical and Philosophical Society of Ohio presented a newspaper of 1874 in the Creek language.

ILLUSTRATIONS

The time of the illustrator was spent in preparing and executing illustrations and maps for Bureau and River Basin Surveys publications and for research associates, and making posters, graphs, charts, diagrams, and maps, and repairing and altering illustrations for the editorial division and other departments of the Institution. Floor plans and front elevations also were executed for the Smithsonian planning committee.

EDITORIAL WORK AND PUBLICATIONS

There were issued 1 Annual Report, 5 Bulletins, and 3 Publications of the Institute of Social Anthropology, as follows:

Sixty-ninth Annual Report of the Bureau of American Ethnology, 1951-1952.
ii+ 30 pp. 1953.

Bulletin 145. The Indian tribes of North America, by John R. Swanton. vi+726 pp., 5 maps. 1952.

Bulletin 150. The modal personality structure of the Tuscarora Indians, as revealed by the Rorschach test, by Anthony F. C. Wallace. viii+120 pp., 1 pl., 8 figs. 1952.

Bulletin 151. Anthropological Papers, Nos. 33-42. ix+507 pp., 37 pls., 25 figs., 7 maps. 1953.

No. 33. "Of the Crow Nation," by Edwin Thompson Denig. Edited, with biographical sketch and footnotes, by John C. Ewers.

No. 34. The water lily in Maya art: A complex of alleged Asiatic origin, by Robert L. Rands.

No. 35. The Medicine Bundles of the Florida Seminole and the Green Corn Dance, by Louis Capron.

No. 36. Technique in the music of the American Indian, by Frances Densmore.

No. 37. The belief of the Indian in a connection between song and the supernatural, by Frances Densmore.

No. 38. Aboriginal fish poisons, by Robert F. Heizer.

No. 39. Aboriginal navigation off the coasts of Upper and Baja California, by Robert F. Heizer and William C. Massey.

No. 40. Exploration of an Adena mound at Natrium, West Virginia, by Ralph S. Solecki.

No. 41. The Wind River Shoshone Sun Dance, by D. B. Shimkin.

No. 42. Current trends in the Wind River Shoshone Sun Dance, by Fred W. Voget.

Bulletin 153. La Venta, Tabasco: A study of Olmec ceramics and art, by Philip Drucker. x+257 pp., 66 pls., 64 figs. 1952.

Bulletin 155. Prehistoric settlement patterns in the Virú Valley, Perú, by Gordon R. Willey. xxii+453 pp., 60 pls., 88 figs. 1953.

Institute of Social Anthropology Publication No. 13. The Tajín Totonac. Part 1. History, subsistence, shelter, and technology, by Isabel Kelly and Angel Palerm. xiv+369 pp., 33 pls., 69 figs., 18 maps. 1952.

Institute of Social Anthropology Publication No. 15. Indian tribes of northern Mato Grosso, Brazil, by Kalervo Oberg. With appendix entitled "Anthropometry of the Umotina, Nambicuara, and Iranxe, with comparative data from other northern Mato Grosso tribes," by Marshall T. Newman. vii+144 pp., 10 pls., 2 figs., 3 maps, 14 charts. 1953.

Institute of Social Anthropology Publication No. 16. Penny capitalism: A Guatemalan Indian economy, by Sol Tax. x+230 pp., 6 maps, 19 charts. 1953.

The following publications were in press at the close of the fiscal year:

Bulletin 152. Index to Schoolcraft's "Indian Tribes of the United States," compiled by Frances S. Nichols.

Bulletin 154. River Basin Surveys Papers: Inter-Agency Archeological Salvage Program. Nos. 1-6.

No. 1. Prehistory and the Missouri Valley Development Program: Summary report on the Missouri River Basin Archeological Survey in 1948, by Waldo R. Wedel.

No. 2. Prehistory and the Missouri Valley Development Program: Summary report on the Missouri Basin Archeological Survey in 1949, by Waldo R. Wedel.

No. 3. The Woodruff Ossuary, a prehistoric burial site in Phillips County, Kans., by Marvin F. Kivett.

No. 4. The Addicks Dam sites:

I. An archeological survey of the Addicks Dam basin, Southeast Texas, by Joe Ben Wheat.

II. Indian skeletal remains from the Doering and Kobs sites, Addicks Reservoir, Tex., by Marshall T. Newman.

No. 5. The Hodges site:

I. Two rock shelters near Tucumcari, N. Mex., by Herbert W. Dick.

II. Geology of the Hodges site, Quay County, N. Mex., by Sheldon Judson.

No. 6. The Rembert Mounds, Elbert County, Ga., by Joseph R. Caldwell.

Appendix. List of River Basin Surveys reports published in other series.

Bulletin 156. The Iroquois Eagle Dance, an offshoot of the Calumet Dance, by William N. Fenton, with an analysis of the Iroquois Eagle Dance and songs, by Gertrude Prokosch Kurath.

Bulletin 157. Anthropological Papers, Nos. 43-48.

No. 43. Stone Monuments of the Rio Chiquito, Veracruz, Mexico, by Matthew W. Stirling.

No. 44. The Cerro de las Mesas offering of jade and other materials, by Philip Drucker.

No. 45. Archeological materials from the vicinity of Mobridge, S. Dak., by Waldo R. Wedel.

No. 46. The original Strachey vocabulary of the Virginia Indian language, by John P. Harrington.

No. 47. The Sun Dance of the Northern Ute, by John Alan Jones.

No. 48. Some manifestations of water in Mesoamerican art, by Robert L. Rands.

Publications distributed totaled 38,596, as compared with 21,505 for the fiscal year 1952.

COLLECTIONS

Acc. No.

188983. 7 ethnological specimens from States of Washington and California, and from the Amazon Basin; 120 archeological specimens from Texas, México and Panamá.

195312. (Through Dr. F. H. H. Roberts, Jr.) Plesiosaur skeleton and spine of hybodont shark from Graneros formation, Newcastle member, in Key-hole Reservoir area, Crook County, Wyo., collected in June 1952 by Dr. Theodore E. White, River Basin Surveys.

195942. Approximately 74 fossil vertebrates from Oligocene and Miocene deposits of Canyon Ferry Reservoir area in Montana, and 4 mollusks, collected August 1952, by Dr. Theodore E. White, River Basin Surveys.

195943. Skeleton, without skull, of fossil reptile from Tongue River member of Fort Union formation in the Fort Garrison Reservoir area, North Dakota, collected in September 1952 by Dr. Theodore E. White, River Basin Surveys.

197275. Archeological materials excavated by field party under Franklin Fenenga at Slick Rock Village, Tulare County, Calif., River Basin Surveys.

197689. 144 specimens from Georgia including deeply weathered flint artifacts from Macon Plateau, Bibb County, and 1 lot of chips, probably from old Oconeeetown, Milledgeville, Baldwin County.

197886. Bones of 2 species of birds from State of Washington. River Basin Surveys.

198525. 613 archeological surface specimens from Eufaula Reservoir, Onapa and Canadian Reservoir areas, southeastern Oklahoma, collected August and September 1948 by David J. Wenner, Jr., River Basin Surveys.

198526. 380 archeological surface specimens from the Eufaula (Gaines Creek) Reservoir, southeastern Oklahoma, collected July and August 1950 by Leonard G. Johnson, River Basin Surveys.

198527. 54 archeological surface specimens from Optima Reservoir, North Canadian River, Texas County, Okla., collected August 1950 by Leonard G. Johnson, River Basin Surveys.

MISCELLANEOUS

Dr. Frances Densmore, Dr. John R. Swanton, and Dr. Antonio J. Waring, Jr., continued as collaborators of the Bureau of American Ethnology. On November 14, 1952, Ralph S. Solecki was named collaborator in archeology.

On February 24, 1953, Mrs. Margaret C. Blaker joined the staff of the Bureau as archives assistant.

Information was furnished during the past year by members of the Bureau staff in reply to numerous inquiries concerning the American Indians, past and present, of both continents. The increased number of requests from teachers, particularly from primary and secondary grades, from Scout organizations, and from the general public, indicates a rapidly growing interest in the American Indian. Various specimens sent to the Bureau were identified and data on them furnished for their owners.

Respectfully submitted.

M. W. STIRLING, *Director.*

Dr. LEONARD CARMICHAEL,

Secretary, Smithsonian Institution.



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= *Seventy-first Annual Report*

of the

**BUREAU OF AMERICAN
ETHNOLOGY**



1953-1954



**SMITHSONIAN INSTITUTION
WASHINGTON
D. C.**



SEVENTY-FIRST
ANNUAL REPORT OF THE
BUREAU OF
AMERICAN ETHNOLOGY

TO THE SECRETARY OF THE
SMITHSONIAN INSTITUTION

1953-1954



UNITED STATES
GOVERNMENT PRINTING OFFICE
WASHINGTON : 1955

BUREAU OF AMERICAN ETHNOLOGY
June 30, 1954

Director.—MATTHEW W. STIRLING.

Associate Director.—FRANK H. H. ROBERTS, JR.

Anthropologists.—H. B. COLLINS, JR., PHILIP DRUCKER.

Ethnologist.—JOHN P. HARRINGTON.

Collaborators.—FRANCES DENSMORE, JOHN R. SWANTON, A. J. WARING, JR.

Scientific Illustrator.—E. G. SCHUMACHER.

RIVER BASIN SURVEYS

Director.—FRANK H. H. ROBERTS, JR.

Archeologists.—PAUL L. COOPER, CARL F. MILLER, G. HUBERT SMITH, RALPH S. SOLECKI, ROBERT L. STEPHENSON, RICHARD P. WHEELER.

SEVENTY-FIRST ANNUAL REPORT
OF THE
BUREAU OF AMERICAN ETHNOLOGY

M. W. STIRLING, *Director*

SIR: I have the honor to submit the following report on the field researches, office work, and other operations of the Bureau of American Ethnology during the fiscal year ended June 30, 1954, conducted in accordance with the act of Congress of April 10, 1928, as amended August 22, 1949, "to continue independently or in cooperation anthropological researches among the American Indians and the natives of lands under the jurisdiction or protection of the United States and the excavation and preservation of archeologic remains."

SYSTEMATIC RESEARCHES

M. W. Stirling, Director of the Bureau, studied in the laboratory and prepared descriptions of the archeological materials collected during 1953 on Taboga, Taboguilla, and Urabá islands in the Gulf of Panama, and from the region of Almirante Bay on the north coast of Panama. Technical descriptions of the materials, principally ceramics, were completed and photographs for illustrations made preparatory to publication of the report in the Bureau's Bulletin series. Otherwise most of the time during the fiscal year was occupied with administrative duties.

Dr. Frank H. H. Roberts, Jr., Associate Director of the Bureau and Director of the River Basin Surveys, devoted virtually all his time during the year to the direction and management of the River Basin Surveys. In that connection he reviewed and revised a number of manuscript reports of the results of field investigations by members of the Surveys' staff. In May he attended the annual meeting of the Society of American Archaeology at Albany, N. Y., and as a member of the executive committee presented a set of Archaeological Standards, prepared jointly by him and Dr. Waldo R. Wedel of the U. S. National Museum, which was adopted by the Society.

Dr. Henry B. Collins, anthropologist, continued his Eskimo research and other Arctic activities. From June 24 to August 29 he and his assistant, William E. Taylor, conducted archeological excavations on Cornwallis Island in the Canadian Arctic, the work being sponsored jointly by the Smithsonian Institution and the National Museum of Canada. Cornwallis and the other islands in the northern part of the Arctic Archipelago were uninhabited when discovered by Parry in 1819, and Eskimos have not lived that far north in Canada in historic

times. However, Dr. Collins's excavations have shown that some centuries ago when living conditions were better, Cornwallis Island had been occupied by two distinct groups of prehistoric Eskimos, the Thule and Dorset. The remains visible on the surface—the ruins of solidly built houses of stones, whale bones, and turf—are those of the Thule people. The Dorset occupation, which preceded Thule, was indicated by a buried sod line within and below which were found the stone, bone, and ivory implements characteristic of that culture. Thule material was found above the old sod line. The Dorset artifacts were different in type from the Thule and were also more deeply patinated, being dark brown or gray in contrast to the light cream-colored Thule objects. The same was true of the animal bones; those from the Dorset level were more weathered in appearance, darker colored, and lighter in weight than the relatively fresh-looking bones from the upper part of the midden. The marked difference in the state of preservation of the animal bones and artifacts suggests that after the Dorset occupation the site had been abandoned for some centuries before the Thule Eskimos established their village on the same spot. Samples of sod, soil, charcoal, wood, bones, skin, and other organic materials were collected for possible dating by radiocarbon and pollen analyses.

Dr. Collins prepared a preliminary report describing the 1953 excavations for the Annual Report of the National Museum of Canada. His booklet "Arctic Area," a summary of existing knowledge of the ethnology, archeology, physical anthropology, and linguistics of the Eskimos and Northern Indians, was published by the Comisión de Historia of Mexico as one of the unit studies in its Program of the History of America. Other papers included a critique of the role of Ipiutak in Eskimo culture and an evaluation of the recently developed technique of lexico-statistics in relation to the archeological evidence. This new linguistic technique, which attempts to estimate the time of separation, or age, of related languages on the basis of vocabulary change, produces results for the Arctic area that are in close agreement with the evidence of two other dating techniques—dendrochronology and radiocarbon analysis—as well as with Dr. Collins's previous reconstruction of culture growths, contacts, and population movements in the Eskimo area as deduced from archeology.

Dr. Collins continued to serve as chairman of the directing committee supervising the work on the *Arctic Bibliography*, which the Arctic Institute of North America is preparing for the Department of Defense under contract with Office of Naval Research. The first three volumes of the Bibliography, of approximately 1,500 pages each, were issued by the Government Printing Office in August 1953. They list and summarize and index the contents of 20,000 of the more important

publications in all fields of science relating to the Arctic and sub-Arctic areas of the world. The work on the Bibliography is being carried out by a staff of 12 bibliographers and scientists under the direction of Miss Marie Tremaine. Most of the work has been done at the Library of Congress but the collections of the New York Public Library, Smithsonian Institution, Harvard University, and some 60 other large libraries in the United States and Canada have also been utilized. In addition to books and monographs, the Bibliography lists and describes material published in more than 1,400 scientific journals and serial publications in English, Russian, and other languages. Titles of foreign-language publications are given in the original and in English, with description of the contents in English. Covering all fields of science for all the Arctic and sub-Arctic, the *Arctic Bibliography* is now recognized as the most comprehensive regional bibliography ever assembled. Volume 4, of approximately 1,500 pages, is scheduled for publication in August 1954. Dr. Collins made arrangements with the Department of the Air Force, which has supported the work for the past two fiscal years, for continuation of the Bibliography project in 1954-55, and for the printing of volume 5, the material for which was delivered to the Government Printing Office in June 1954.

On June 21, Dr. Collins and three assistants, William E. Taylor, Jr., Dr. J. Norman Emerson, and Eugene Ostroff, left to conduct archeological work in Hudson Bay. The expedition is being sponsored by the National Museum of Canada, the National Geographic Society, and the Smithsonian Institution. The party was flown by the Royal Canadian Air Force from Montreal to Coral Harbour, on Southampton Island, and will remain until September, investigating prehistoric Eskimo sites on Southampton and Coats Islands.

During July and August of 1953, Dr. John P. Harrington was in the region of Santa Barbara, Calif., continuing his studies of the Chumash Indians, the most advanced tribe of the State. He also made a special study of place names as recorded by the Cabrillo expedition of 1542 and by the Portola and Anza expeditions of 1769 and 1776, respectively. A great majority of these names were located during the field study. On returning to Washington Dr. Harrington continued the preparation of a detailed report on his findings.

At the beginning of the fiscal year Dr. Philip Drucker, anthropologist, was in Washington continuing his studies of Olmec archeological materials from southern Mexico. He also began preparations for a field trip to the coast of British Columbia and southeast Alaska in order to continue his study of modern intertribal Indian organization. Early in September he went to British Columbia to carry on this research. A grant from the Arctic Institute of North America made this work possible. Toward the end of the calendar year a supple-

mentary grant from the American Philosophical Society enabled him to proceed to southeast Alaska to complete his study of the Alaska Native Brotherhood. In mid-March he returned to Washington. Since his return Dr. Drucker has worked on the final report on these intertribal organizations and on related problems of acculturation on the Northwest Coast. He also devoted considerable time to a committee study of the research potential of the Smithsonian Institution. During the fiscal year Drucker prepared two papers for publication, one on "Origins of Northwest Coast Culture" and the other with Eduardo Contreras on "Site Reconnaissance in Olmec Territory."

RIVER BASIN SURVEYS

(Prepared by FRANK H. H. ROBERTS, JR.)

The River Basin Surveys, instituted in the autumn of 1945 as a unit of the Bureau of American Ethnology to carry into effect a memorandum of understanding between the Smithsonian Institution and the National Park Service, providing for the salvage of archeological and paleontological materials which will be lost as a result of the nation-wide program for flood control, irrigation, hydroelectric and navigation projects sponsored by the Federal Government, State, and private agencies, continued its operations during the year. As in previous years the work was carried on in cooperation with the National Park Service and the Bureau of Reclamation of the Department of the Interior, the Corps of Engineers, Department of the Army, and a number of State and local institutions. During the fiscal year 1953-54 the investigations were financed by transfer of \$71,495 from the National Park Service to the Smithsonian Institution. Included in that sum were \$64,500 for work in the Missouri Basin and \$6,995 for other areas. An additional carry-over of \$3,409 made the over-all total available for obligation during the fiscal year \$74,904. That sum was approximately only 43 percent of that available for the preceding year and made necessary a sharp reduction in the work of the River Basin Surveys.

Activities in the field consisted for the most part of reconnaissances or surveys for the purpose of locating sites that will be involved in construction work or are so situated that they will eventually be covered by the waters of the reservoirs formed by the completion of dams. There also was some excavation, but because of lack of funds the digging was on a small scale. In several reservoir areas intensive test surveys were carried on. The parties concerned with that activity visited sites previously located and recorded but about which there was meager information. At each such site a number of test pits were dug and artifacts were collected in order to determine the cultural affiliations of the remains found there. Straight reconnaissance parties

visited two reservoir basins located in one State. The intensive test surveys were made in three reservoir areas in two States. At the end of the fiscal year excavations were completed or were under way in four reservoir basins in two States. During the course of the year there were four excavating parties in the field, three of them in areas where investigations had previously been made. By June 30, 1954, areas where archeological surveys had been made or excavations carried on since the start of the program in 1946 totaled 243 in 27 States. One lock project and four canal areas also have been investigated. During the course of the work a total of 4,345 archeological sites have been recorded and of that number 852 have been recommended for excavation or further testing. Preliminary appraisal reports were completed for all the reservoirs surveyed and further supplemental reports have been prepared where additional reconnaissances have resulted in the discovery of further sites. During the course of the year seven such reports were issued. The total number distributed since the start of the program is 179. Where several reservoirs form a unit in a single drainage subbasin, the information on all was included in a single report. Consequently, the 179 mimeographed pamphlets contain information on all the 243 reservoirs thus far surveyed. Excavations carried on during the year brought the total for reservoir projects where such investigations have been made to 44 located in 17 different States. The total number of sites thus far excavated or extensively tested totals 324. Fourteen manuscript reports on previous excavation work were completed during the year and are ready for publication. One major technical report was in final page-proof form at the end of the fiscal year and will appear as Bureau of American Ethnology Bulletin 158. In view of the necessary reduction in force because of lack of funds, no paleontological field work was carried on during the year. The paleontologist who formerly was a member of the River Basin Surveys staff was lent by the National Park Service for a period of three weeks to the Missouri Basin Project of the River Basin Surveys in order that he might complete the identification of specimens previously collected.

The reservoir projects which have been surveyed for archeological remains as of June 30, 1954, were distributed as follows: Alabama, 1; California, 20; Colorado, 24; Georgia, 5; Idaho, 11; Illinois, 2; Kansas, 10; Kentucky, 2; Louisiana, 2; Minnesota, 1; Mississippi, 1; Montana, 15; Nebraska, 28; New Mexico, 1; North Dakota, 13; Ohio, 2; Oklahoma, 7; Oregon, 27; Pennsylvania, 2; South Dakota, 9; Tennessee, 4; Texas, 19; Virginia, 2; Washington, 11; West Virginia, 2; and Wyoming, 22.

Excavations have been made or were under way in reservoir basins in: California, 5; Colorado, 1; Georgia, 4; Kansas, 3; Montana, 1; Nebraska, 1; New Mexico, 1; North Dakota, 4; Oklahoma, 2; Oregon,

3; South Carolina, 1; South Dakota, 3; Texas, 7; Virginia, 1; Washington, 4; West Virginia, 1; and Wyoming, 2. The foregoing figures include only the work of the River Basin Surveys or that in which there was direct cooperation with local institutions. Projects that were carried on by local institutions under agreements with the National Park Service are not included because complete information about them is not available.

During the year the River Basin Surveys continued to receive helpful cooperation from the National Park Service, the Bureau of Reclamation, Corps of Engineers, and various State and local institutions. Temporary office and laboratory space were provided at some of the projects, transportation and guides were furnished at others, and in several cases mechanical equipment was made available by the construction agency. Detailed maps of the reservoirs under investigation were supplied by the agency concerned. The field personnel of the various agencies was extremely cooperative in assisting the River Basin Surveys men and because of that help much more was accomplished than would have been possible otherwise. The National Park Service continued to function as the liaison between the various agencies both in Washington and in the field. It also was responsible for the preparation of estimates and justifications and the procurement of funds for carrying on the program. The co-operation of Park Service personnel was a definite aid in all phases of the operations.

The main office in Washington directed and supervised the program in the East and South while the field headquarters and laboratory in Lincoln, Nebr., directed the work in the Missouri Basin. The materials collected by Missouri Basin parties were handled at the Lincoln laboratory while those from the East and South were processed in Washington.

Washington Office.—Through the fiscal year the main headquarters of the River Basin Surveys continued under the direction of Dr. Frank H. H. Roberts, Jr. Carl F. Miller and Ralph S. Solecki were based at that office although Mr. Solecki was on leave without pay during most of the year. From July 1953 until May 12, 1954, Mr. Solecki was in Iraq as a Fulbright Scholar, conducting excavations financed jointly by the Iraq Government and the Smithsonian Institution. On May 12, 1954, he returned to active duty with the River Basin Surveys and made a reconnaissance of two projects on the Cumberland River in Tennessee. On June 28 he resigned to resume his graduate studies in anthropology.

Mr. Miller spent the greater part of the year in the office preparing reports based upon field investigations made in previous years. In August he completed a brief preliminary report of a rapid reconnaissance of the Cheatham Lock and Dam, Old Hickory, and Carthage

Reservoirs in Tennessee. He completed one manuscript pertaining to the Siouan occupation of the Roanoke River area in southern Virginia. This research was an outgrowth of his studies in connection with the results of his excavations at the John H. Kerr (Buggs Island) Reservoir. In addition Mr. Miller worked on his detailed technical report for the John H. Kerr Reservoir, completing the analysis, classification, and comparison of specimens obtained from a number of different sites. In May 1954, Mr. Miller made a brief trip to a site along the old Chesapeake and Ohio Canal near Sharpsburg, Md., where traces of an Indian occupation were being uncovered by erosion. On that trip Mr. Miller accompanied Dr. John M. Corbett and John L. Cotter of the Archeological Branch, History Division, National Park Service. At the close of the fiscal year Mr. Miller was busy working on his John H. Kerr report.

Missouri Basin.—The Missouri Basin Project continued to operate throughout fiscal 1954 from the field headquarters at the University of Nebraska and the laboratory in the business section of Lincoln, Nebr. Robert L. Stephenson served as acting chief of the project from July 1 to June 14 when he was promoted to chief. Activities throughout the year were greatly reduced because of the lack of funds. The permanent staff had been cut from 21 to 11 on July 1 and during the year was further reduced to 8. Consequently field activities were on a much smaller scale. However, all four phases of the salvage program as originally drawn up were in progress. Some reconnaissance work was done consisting of intensive survey and testing of archeological sites in two reservoirs and reconnaissance of a portion of a third reservoir. The second phase, the excavation of selected sites, continued at three sites in three reservoir areas while a fourth field party did some digging at four sites in a single reservoir area. The third phase of the program, the processing of the collections obtained from the digging, the analysis and study of the materials, and the preparation of general and technical manuscripts on the results, was carried on actively by the members of the staff. Phase four, the publication and dissemination of scientific and popular reports, showed some accomplishment. Several short papers were published during the year and one long report was in the final stages of printing at the Government Printing Office. By the end of the fiscal year 10 manuscripts had been completed and submitted for publication.

During the year six River Basin Surveys field parties operated in the Missouri Basin. In July, August, and September one party visited 57 previously located sites in the Fort Randall Reservoir and carried on test excavations in 18 of them. Test pits were dug and surface collections of artifacts were made at the other 39 sites. Many of them were actually in the process of being inundated by the rising waters of the reservoir at the time the party visited them. A total of 5 previously

unrecorded sites were located in addition to the 57 examined and sample collections were made from each. During August, September, and October another party made an intensive reconnaissance and tested major sites in the Oahe Reservoir area in north central South Dakota. The purpose of that party was to locate new and unrecorded sites in the area, to visit all the old sites reported in previous years in order to reevaluate them in terms of new information, and to test extensively those which seemed to warrant full-scale exploration in order to determine the minimum amount of digging necessary to obtain a fair sample from each. The party accomplished all three objectives. Eleven previously unknown sites were recorded and tests made in them. A total of 89 previously located sites were revisited and tests of varying intensiveness were made in 45.

In May 1954 a reconnaissance party returned to the Fort Randall Reservoir to obtain further information from several additional sites for which the data were not conclusive. The party found that several of those scheduled for study had already gone under water but by the end of the fiscal year 13 had been visited and more or less intensively investigated. Extensive excavations were carried out at three of them. At one a circular house and an exterior cache pit were dug, and at another stratified camp remains were trenched. At the end of the year the party was clearing debris from the ruins of an earth lodge. A second party also went to the Fort Randall Reservoir in May to complete investigations at a large earth-lodge village which had been occupied by at least two groups of prehistoric Indians and where considerable work had been done during two previous seasons. At the end of the year that party was still in the field, having excavated earth lodges, palisade trenches, and cache pits, establishing not only the two occupations previously noted but a third one as well. The evidence obtained indicates that the three occupations took place at various times between A. D. 1500 and 1700. At the end of the year the water of the reservoir had already risen to the lower edges of the site and it was expected that by mid-July the entire area would be under several feet of water.

A third party went to the Garrison Reservoir in North Dakota in May and resumed excavations at the site of Fort Berthold II where extensive digging had been done during the 1952 field season. Shortly after arriving at the location the River Basin Surveys party joined forces with one from the State Historical Society of North Dakota which was working under a cooperative agreement with the National Park Service. As a single unit, the combined group completed the excavation of all features of the site of Fort Berthold II, which was occupied by both fur traders and American military forces from about 1858 to 1890. The group then turned its attention to the remains of the adjacent Indian village where considerable digging had been done

in previous years by the North Dakota Society. During the progress of the operations the remains of Fort Berthold I, an earlier fur-trading post dating from 1845 to 1862, were located and uncovered. The original post had been burned by the Sioux Indians and earth lodges erected over the site. For that reason its location was long in doubt and it was a fortunate circumstance that it was found because much previously unknown information on the fur trade during the middle nineteenth century was obtained. At the end of the fiscal year the joint field party was occupied with the remains of Indian houses located between the two trading posts. No further work will be possible there after the 1954 field season because the Garrison Reservoir was to cover it before the end of the summer. Heavy equipment was used with marked success during the digging at the Garrison Reservoir. By using a road grader and a bulldozer it was possible to define for the first time the entire course of the palisade which originally enclosed the oldest portion of the Indian village. As a result of the investigations, a complete detailed map of the entire Indian village and the two Fort Bertholds could be made.

The fourth party went to the Jamestown Reservoir area in east-central North Dakota early in June. It devoted three weeks to a survey of the upper end of the basin, locating five new sites of which three were tested. The remaining time was spent digging at the location of a former earth-lodge village where excavations were started during the 1952 field season. The work of the 1954 season determined the limits of the village and added enough new information to make possible a fairly accurate description of early eighteenth century Mandan culture in that part of the Plains. There were other sites in the area which merited further study but since flooding was already well under way, no additional work could be done. The party had returned to the headquarters at Lincoln by the end of the fiscal year.

During July two of the temporary staff members assisted a joint party from Kansas State College and the Laboratory of Anthropology of the University of Nebraska in excavations at a site in the Tuttle Creek Reservoir in northeastern Kansas. The site was partially dug by a River Basin Surveys group in June 1953 but it was not possible to complete the work that had been started before the party had to return to the Lincoln headquarters. Since portions of an earth lodge and other village features had been uncovered, it was essential to finish those investigations and to accomplish that end the cooperative effort was organized under the sponsorship of Kansas State College. The information obtained helps to explain a little-known phase of the history of that particular district.

During the year the Laboratory at Lincoln processed 27,965 specimens from 181 sites in 3 reservoir areas and 5 unassignable sites. A total of 5,346 catalog numbers were assigned to the series of specimens.

As of June 30, 1954, archeological materials from 1,496 sites in reservoir areas and from 43 sites outside reservoir areas where loss from other construction was imminent had been catalogued. The work in the laboratory also included: reflex copies of record sheets, 9,488; photographic negatives, 2,160; photographic prints, 12,367; prints mounted to illustrate manuscripts, 220; photographic transparencies mounted in glass, 188; drawings, tracings, and maps, 211; pottery vessels restored, 5; pottery vessel sections restored, 145; specimens drawn for illustration, 57; plate layouts for manuscripts, 122; restorations of human crania, 10.

Interpretative displays showing the scope and results of archeological investigations in the Missouri Basin were installed from time to time in the windows of the laboratory in the business section of Lincoln and in one of the main banks of the city. A special display explaining the archeological salvage program was also installed at the Nebraska State Fair held at Lincoln during September. The latter attracted considerable attention from visitors to the fair.

Paul L. Cooper, archeologist, was at the Lincoln headquarters at the beginning of the fiscal year and did not make any field trips during the summer of 1953. He devoted the months at the laboratory to the completion of a summary report of the Missouri Basin salvage program during the calendar years 1950-51. He also completed for publication a technical report on the excavations made at the Heart Butte Reservoir during a previous season. In addition he worked on a report of investigations in three burial mounds, two near the location of the former Wheeler Bridge and the White Swan Mound which was in the area of the spillway of the Fort Randall Dam. A report on the human skeletal material is being prepared by Dr. Marshall T. Newman of the U. S. National Museum and will appear as an appendix to the archeological report. Mr. Cooper participated in the sessions of the Eleventh Conference for Plains Archeology held at Lincoln in November. On May 16 he proceeded to the Fort Randall Reservoir area in South Dakota and directed an intensive test survey of 13 sites and carried on excavations in 3 sites. Some of them had already been partially inundated and others were flooded shortly after they were investigated. At the end of the fiscal year he was continuing his operations in the Fort Randall area.

Robert B. Cumming, archeologist, was at the headquarters in Lincoln at the start of the fiscal year. On July 27 he left for the Fort Randall Reservoir area in charge of a party which was to make intensive test surveys during the period extending to September 12. After instructing the party as to the proper procedure, he returned to the Lincoln headquarters and devoted his time to analyzing and preparing a report on the results of his previous investigations in that area. During the time he was at the laboratory Mr. Cumming completed a

technical report on the excavations which he had made at the Tuttle Creek Dam in Kansas the previous year. He also prepared a special report concerning the archeological potentialities of the Powder River Basin in Wyoming. In November he participated in the Eleventh Conference for Plains Archeology, presenting 3 papers. On May 17 he returned to the Fort Randall Reservoir area and resumed excavations at a site where work had been done during two previous field seasons. On May 31 he returned to the field headquarters leaving his party under the direction of Harold A. Huscher. Mr. Cumming resigned from the River Basin Surveys on June 6 after having been with the Missouri Basin Project from its inception in 1946.

Harold A. Huscher, field assistant, was in direct charge of the field party in the Fort Randall area from July 27 to September 12. He worked under the general supervision of Robert B. Cumming. During the time he was in the field he supervised the testing of 18 sites and located 5 which were previously unrecorded. After returning to the field headquarters at Lincoln, Mr. Huscher completed a report on the summer's work. He returned to the university for graduate work during the fall and winter and rejoined the River Basin Surveys in June when he took charge of the excavating party, which had been under Mr. Cumming's direction, in the Fort Randall area. At the end of the fiscal year, Huscher and his group were busy stripping a large area and uncovering house remains at the important Oldham site.

G. H. Smith, archeologist, rejoined the staff of the Missouri Basin Project in May and proceeded to the Garrison Reservoir area in North Dakota where he resumed excavations at the site of Fort Berthold II and Like-a-Fishhook village. Smith was subsequently joined by Alan R. Woolworth, curator of the Museum of the State Historical Society of North Dakota, and his group of laborers and the combined parties worked as a unit in carrying on the excavations. In addition to completing the investigation of Fort Berthold II which Smith had started in the summer of 1952, various Indian house remains were cleared and the original Fort Berthold, which was established by the American Fur Company in 1845, was located. In addition to those activities, the general base map of the entire area which had been started in 1952 was completed. This provides for the first time an adequate historical and archeological map of the entire site. The joint field party was still at work there at the close of the fiscal year. During the year Mr. Smith completed the detailed technical report on the excavations which he made in a previous season at the site of Fort Stevenson, also in the Garrison area.

During the fiscal year Robert L. Stephenson, chief of the Missouri Basin Project, devoted the major portion of his time to directing the operations of the project. In addition, however, he prepared a series

of summary statements on the 7 years of the project's activities. He also virtually completed a technical report, "Archeological Investigations in the Whitney Reservoir Area, Hill County, Texas," and prepared an article on salvage archeology for the *Bible Archeological Digest* and a paper, "Taxonomy and Chronology in the Central Plains-Middle Missouri River Area," which was published in the *Plains Anthropologist*, No. 1. He also took an active part in the Eleventh Conference for Plains Archeology and presented a paper at the Sixty-fourth Annual Meeting of the Nebraska Academy of Sciences in Omaha. He gave the principal address at the Semiannual Meeting of the Missouri Archeological Society held in Kansas City in May. In June he made a tour of inspection, visiting the various field parties working in the Missouri Basin.

Richard Page Wheeler, archeologist, was at the field headquarters at the beginning of the fiscal year working on reports covering his previous investigations. On August 13 he proceeded to the Oahe Reservoir area in South Dakota where until October 9 he, with two assistants, made an intensive survey of the lower section of the area. In the course of the work 82 previously recorded sites were visited and 16 new ones were discovered. In a number of instances material new to the Oahe area was noted and one of the sites gave evidence of five successive occupations. After returning to headquarters Wheeler devoted the winter and spring months to work on technical reports concerning excavations made in previous seasons at the Angostura, Boysen, and Keyhole reservoirs in South Dakota and Wyoming. He completed two articles; one, "Selected Projectile Point Types of the United States: II," was published in the *Bulletin of the Oklahoma Anthropological Society*, vol. 2, while the other, "Two New Projectile Point Types: Duncan and Hanna Points," was printed in the *Plains Anthropologist*, No. 1. He participated in the Eleventh Conference for Plains Archeology and attended the Sixty-fourth Annual Meeting of the Nebraska Academy of Sciences where he presented a paper, "New Contributions to the Archeology of Oahe Reservoir." At that time he was elected chairman of the anthropology section for the Sixty-fifth Annual Meeting of the Academy. On June 3 Wheeler proceeded to the Jamestown Reservoir in North Dakota and resumed excavations at a site where he dug in 1952. While that work was going on he also made a survey of the upper end of the reservoir basin. The Jamestown investigations were completed and Wheeler returned to the Lincoln Office on June 30.

Tennessee.—The only work done in Tennessee during the year was the detailed surveys of the Cheatham Lock and Dam and Old Hickory Lock and Dam projects on the Cumberland River near Nashville. A brief preliminary reconnaissance of the area in June 1953 indicated that a more extended examination was warranted and arrangements

were made for further investigations. During the period from May 17 to June 2 both projects were covered on foot, by vehicle, by boat, and by two flights over them in light planes for photographic purposes. The Cheatham Dam is located 35 river miles below Nashville and the reservoir it impounds will be about 67.5 river miles long. Twenty archeological sites were found in the area but only one will be affected by the flooding of the basin. The others, lying on the second and third bottoms or higher slopes will not be in danger. The one which will be involved represents an Archaic horizon and test digging in it was recommended. At one of the higher-level locations a fluted point was found in association with a series of nondescript flakes and chips. This indicates that the Paleo-Indian was in the area, although there may not be a true site for that horizon. The Old Hickory Dam is located 25 river miles upstream from Nashville and 2 river miles below the town of Old Hickory. The reservoir which it forms will extend 97.3 river miles above it. Twenty-three archeological sites were found within the limits of the proposed pool. The sites comprise 18 Archaic, 1 Middle Mississippi, 1 cave of undetermined cultural affiliations, although probably Middle Mississippi, and 3 which did not give sufficient surface evidence to permit identification. Test excavations were recommended for four of the sites.

Cooperating institutions.—As in previous years, a number of State and local institutions cooperated in the Inter-Agency Salvage Program. In a few cases State groups carried on independently, but correlated their activity closely with the over-all operations. Most of the projects, however, were under agreements between the National Park Service and the various agencies. In Indiana the Historical Society continued to include surveys of proposed reservoir areas in its general program for archeological investigations in that State and made reports on the results of its work. The Ohio State Archeological and Historical Society again conducted salvage operations in several localities. The Alabama Museum of Natural History and the Birmingham Anthropological Society voluntarily investigated the situation along the Coosa River Valley where a series of dams was planned by the Alabama Power Company. Louisiana State University made a survey of the construction area for a new river channel at the mouth of Old River in Louisiana. The cooperative efforts of the Kansas State College and Laboratory of Anthropology of the University of Nebraska at the Tuttle Creek Dam have already been discussed.

Institutions working under agreements with the National Park Service and the projects undertaken were: the University of California, Berkeley, in the summer of 1953 completed the excavation of sites in the Nimbus and Redbank Reservoir basins, obtaining important data from the latter, and in the late spring of 1954 began investigations in the Monticello Reservoir basin; the University of Missouri

excavated in the Table Rock Reservoir area on the White River in Missouri during the summer of 1953 and returned to the same area in June 1954; during the first quarter of the year the University of Kansas completed excavation at four sites in the Fort Randall Reservoir basin in South Dakota; the Nebraska State Historical Society started a series of excavations on June 10 at the Crow Creek site in the Fort Randall Reservoir basin and had just gotten well under way at the end of the fiscal year; the University of Nebraska State Museum completed work on a portion of one site in the Medicine Creek Reservoir area in western Nebraska at the end of July and then moved to the Big Sandy project in southwestern Wyoming where a number of sites were investigated during the month of August, paleontological studies being conducted on a voluntary basis at several locations in the Missouri Basin by the same organization; as previously noted, the State Historical Society of North Dakota resumed its activities at the Garrison Reservoir, North Dakota, in May and was still at work at the end of the fiscal year; the University of Oklahoma was preparing to start surveys late in June at the Norman, Foss, and Fort Cobb reservoir projects in that State; the University of Oregon excavated at sites in The Dalles Reservoir on the Oregon side of the Columbia River in the summer of 1953 and returned to the same locality for the 1954 field season; a joint party of the W. H. Over Museum of the University of South Dakota and South Dakota Archeological Commission completed excavation at the Spotted Bear and Cottonwood sites in the Oahe Reservoir area in South Dakota in the first quarter of the year and in June returned to the same basin and started digging at the Swan Creek site; the University of Utah was preparing to start a basin-wide survey in the Missouri Basin at the close of the fiscal year; the University of Washington carried on excavations at the Wakemap Mound on the Washington side of the Columbia River at The Dalles Reservoir project during the first quarter and returned to the same location in June. In the case of the three cooperating groups in the Missouri Basin, the River Basin Surveys assisted the field activities by the loan of vehicles and other equipment.

ARCHIVES

Mrs. Margaret C. Blaker, archivist for the Bureau, continued her program of reorganizing the manuscript and photographic collections in addition to the usual daily routine.

From time to time the photographic and manuscript collections of the archives are enriched by gifts from persons who find old or rare items in their possession. During the past fiscal year among the more important additions received were the following:

About 100 prints and 16 glass-plate negatives of California Indians made ca. 1889-95 by the Rev. H. C. Meredith, a missionary. Received through John Witthoft, Pennsylvania State Museum.

Twenty mounted stereoscopic views of ethnological subjects made on the Geographical Explorations and Surveys West of the 100th Meridian ("Wheeler Surveys") of 1871, 1873 and 1874. Gift of Vincent McMullen, Washington, D. C.

Thirty photographic prints of Crow Indians made by Dr. Dixon on the Wannamaker expedition to the Plains, 1909-13. Received through Dr. Georg Neumann.

The following photographs were received through loan for copying:

Fifty-seven original prints of Kiowa and Comanche Indians made in and around Fort Sill, Okla., on the Kiowa Reservation in the 1890's by various photographers, including George W. Bretz. Lent by F. B. Shuler, Hamilton, Ohio.

Photographic print (copy), a portrait of Billy Bowlegs, Seminole leader, thought to have been made in 1852. Lent by H. P. Kennedy, Tampa, Fla.

Photograph of a Kansa delegation to Washington in winter of 1909-10. Lent by Vincent McMullen, Washington, D. C.

Identifications of a number of portraits of Kiowa and Comanche Indians living on the Kiowa Reservation in the 1890's were supplied by Arthur R. Lawrence, Lawton, Okla., who obtained the information from descendants or contemporaries of the individuals portrayed.

ILLUSTRATIONS

During the past fiscal year, E. G. Schumacher, illustrator, continued the preparation of illustrations, charts, maps, and diagrams for publications of the Bureau of American Ethnology, including those of the River Basin Surveys. Time was also taken to prepare and execute many miscellaneous diagrams, drawings, and other illustrative materials for different branches of the Institution.

EDITORIAL WORK AND PUBLICATIONS

There were issued 1 Annual Report and 3 Bulletins, as follows:

Seventieth Annual Report of the Bureau of American Ethnology, 1952-1953. ii+33 pp. 1954.

Bulletin 152. Index to Schoolcraft's "Indian Tribes of the United States," compiled by Frances S. Nichols. vi+257 pp. 1954.

Bulletin 154. River Basin Surveys Papers: Inter-Agency Archeological Salvage Program. Nos. 1-6. xviii+336 pp., 56 pls., 40 figs. 1953.

No. 1. Prehistory and the Missouri Valley Development Program: Summary report on the Missouri River Basin Archeological Survey in 1948, by Waldo W. Wedel.

No. 2. Prehistory and the Missouri Valley Development Program: Summary report on the Missouri River Basin Archeological Survey in 1949, by Waldo R. Wedel.

No. 3. The Woodruff Ossuary, a prehistoric burial site in Phillips County, Kansas, by Marvin F. Kivett.

No. 4. The Addicks Dam sites:

I. An archeological survey of the Addicks Dam basin, Southeast Texas, by Joe Ben Wheat.

II. Indian skeletal remains from the Doering and Kobs sites, Addicks Reservoir, Texas, by Marshall T. Newman.

No. 5. The Hedges site:

- I. Two rock shelters near Tucumcari, New Mexico, by Herbert W. Dick.
- II. Geology of the Hedges site, Quay County, New Mexico, by Sheldon Judson.

No. 6. The Rembert Mounds, Elbert County, Georgia, by Joseph R. Caldwell.

Appendix. List of River Basin Surveys reports published in other series. Bulletin 156. The Iroquois Eagle Dance, an offshoot of the Calumet Dance, by William N. Fenton, with an analysis of the Iroquois Eagle Dance and songs, by Gertrude Prokosch Kurath. vi+324 pp., 28 pls., 36 figs. 1953.

The following publications were in press at the close of the fiscal year:

Bulletin 157. Anthropological Papers, Nos. 43-48.

No. 43. Stone Monuments of the Río Chiquito, Veracruz, Mexico, by Matthew W. Stirling.

No. 44. The Cerro de las Mesas offering of jade and other materials, by Philip Drucker.

No. 45. Archeological materials from the vicinity of Mobridge, South Dakota, by Waldo R. Wedel.

No. 46. The original Strachey vocabulary of the Virginia Indian language, by John P. Harrington.

No. 47. The Sun Dance of the Northern Ute, by J. A. Jones.

No. 48. Some manifestations of water in Mesoamerican art, by Robert L. Rands.

Bulletin 158. River Basin Surveys Paper No. 7. Archeological Investigations in the Oahe Dam area, South Dakota, 1950-51, by Donald J. Lehmer.

Bulletin 159. The Horse in Blackfoot Indian culture, with comparative material from other western tribes, by John C. Ewers.

Bulletin 160. A ceramic study of Virginia archeology, by Clifford Evans, with an appendix on an analysis of projectile points and large blades, by C. G. Holland.

Publications distributed totaled 21,229, as compared with 38,596 for the fiscal year 1953.

COLLECTIONS

Acc. No.

- 194273. Casts of vessels and figurines excavated at Cerro de las Mesas, Veracruz, Mexico, in 1941. Original material collected by Dr. M. W. Stirling, 1948.
- 194274. Potsherds and figurines excavated at La Venta, Tabasco, Mexico. Collected by Philip Drucker, 1942.
- 195872. Twenty-five pottery vessels from Veraguas, Panama. Collected by Dr. M. W. Stirling, 1951.
- 200850. Nine gold, copper, and pottery objects from Panama (1951), and 2 archaic pottery figurines from Mexico (1946). Collected by Dr. M. W. Stirling.
- 201030. Eleven stone beads from Veraguas, Panama (1949), and 1 effigy bird from Veracruz, Mexico. Collected by Dr. M. W. Stirling.
- 201671. Pottery vessel from Panama. Collected by Dr. M. W. Stirling, 1951.
- 202489. Twenty-six ethnographical specimens from a sub-Andean Indian tribe of Colombia, S. A.

196412. Miscellaneous bones of 7 species of mammals from Sapeloe Island, Ga., carbon-14 determined age about 3,800 years. Through Dr. A. J. Waring.

199026, 201160. One snake, 1 gecko, 3 grasshoppers, and 6 marine mollusks from Taboga Island, Panama Bay, collected by Dr. M. W. Stirling, 1953.

FROM RIVER BASIN SURVEYS

199132. Eighteen archeological specimens from 4 sites in Albeni Falls Reservoir area, Pend Oreille River, Bonner Co., Idaho. Collected by Joel L. Shiner, 1952.

199133. Ninety archeological specimens from 2 sites in Cachuma Reservoir area on Santa Ynez River, Santa Barbara Co., Calif. Collected by Albert D. Mohr, 1952.

199134. 650 archeological specimens from Site 45 BN 3, McNary Reservoir, Columbia River, Benton Co., Wash. Collected by Dr. Douglas Osborne, 1948.

199267. Two bird bones from North-South Dakota area. Through Robert L. Stephenson.

199210, 200377. Thirty fresh-water mussels from archeological sites in the Missouri Basin. Through Robert L. Stephenson.

199430. Fifty-seven Oligocene fossil mammal specimens from Canyon Ferry Reservoir area in Montana, collected by Dr. Theodore E. White, June 1953.

200125. Pottery, stone, bone, and shell artifacts and human skeletal material from the Woodruff Ossuary, Phillips Co., Kans. Collected by Marvin L. Kivett, 1946.

MISCELLANEOUS

Dr. Frances Densmore, Dr. John R. Swanton, Dr. Antonio J. Waring, Jr., and Ralph S. Solecki continued as collaborators of the Bureau of American Ethnology.

On April 30, 1954, Dr. John P. Harrington retired after 39 years' service as ethnologist on the staff of the Bureau. Upon his retirement he was appointed research associate of the Smithsonian Institution and will continue his linguistic studies in that capacity.

Information was furnished during the past year by members of the Bureau staff in reply to numerous inquiries concerning the American Indians, past and present, of both continents. The increased number of requests from teachers, particularly from primary and secondary grades, from Scout organizations, and from the general public, indicates a rapidly growing interest in the American Indian. Various specimens sent to the Bureau were identified and data on them furnished for their owners.

Respectfully submitted.

M. W. STIRLING, *Director.*

Dr. LEONARD CARMICHAEL,
Secretary, Smithsonian Institution.



Seventy-second Annual Report

of the

BUREAU OF AMERICAN ETHNOLOGY

1954-1955



SMITHSONIAN INSTITUTION

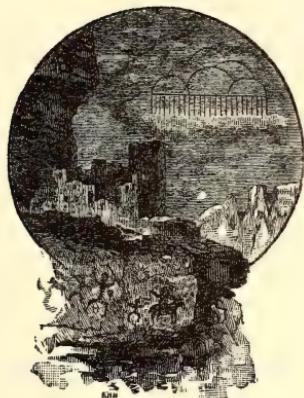
WASHINGTON

D. C.

SEVENTY-SECOND
ANNUAL REPORT OF THE
BUREAU OF
AMERICAN ETHNOLOGY

TO THE SECRETARY OF THE
SMITHSONIAN INSTITUTION

1954-1955



UNITED STATES
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BUREAU OF AMERICAN ETHNOLOGY
June 30, 1955

Director.—MATTHEW W. STIRLING.

Associate Director.—FRANK H. H. ROBERTS, Jr.

Anthropologists.—H. B. COLLINS, Jr., PHILIP DRUCKER.

Collaborators.—FRANCES DENSMORE, JOHN R. SWANTON, A. J. WARING, Jr.,
R. J. SQUIER, R. F. HEIZER, SISTER M. INEZ HILGER, RALPH S. SOLECKI.

Research Associate.—JOHN P. HARRINGTON.

Scientific Illustrator.—E. G. SCHUMACHER.

RIVER BASIN SURVEYS

Director.—FRANK H. H. ROBERTS, Jr.

Archeologists.—CARL F. MILLER, G. HUBERT SMITH, ROBERT L. STEPHENSON,
RICHARD P. WHEELER.

SEVENTY-SECOND ANNUAL REPORT
OF THE
BUREAU OF AMERICAN ETHNOLOGY

M. W. STIRLING, *Director*

SIR: I have the honor to submit the following report on the field researches, office work, and other operations of the Bureau of American Ethnology during the fiscal year ended June 30, 1955, conducted in accordance with the Act of Congress of April 10, 1928, as amended August 22, 1949, which directs the Bureau "to continue independently or in cooperation anthropological researches among the American Indians and the natives of lands under the jurisdiction or protection of the United States and the excavation and preservation of archeologic remains."

SYSTEMATIC RESEARCHES

In addition to his administrative duties, Dr. M. W. Stirling, Director of the Bureau, completed the preliminary studies of the archeological collections made in Panama in 1953, and prepared for publication the sections relating to Taboga, Taboguilla, and Uravá Islands, and also that from Almirante Bay on the Panama north coast.

Dr. Frank H. H. Roberts, Jr., Associate Director of the Bureau, was occupied principally with duties pertaining to the management of the River Basin Surveys, of which he is Director (see his report, p. 5). He reviewed and revised a number of manuscripts on the results of excavations at sites in various areas. In the latter part of September Dr. Roberts went to Lincoln, Nebr., to discuss the operations of the field office located there and to talk with the men who were coming in from the field. En route to Lincoln he visited the Department of Anthropology at the University of Michigan where he examined various archeological collections and spoke to a group of students on the problem of Early Man in America. In November he attended the 12th Plains Conference for Archeology held at the Laboratory of Anthropology, University of Nebraska, and took part in discussions on the archeology of the Missouri Basin. During the winter months he devoted a portion of his time to the preparation of a manuscript covering the high points and summarizing the activities of the River Basin Surveys from the beginning of fieldwork in

the summer of 1946 to the end of the calendar year 1954. In May he attended the annual meeting of the Society for American Archaeology at Bloomington, Ind., and participated in a symposium on the archeological salvage program. Thence he proceeded to Lincoln where he spent a week reviewing the activities of the field office and laboratory and assisting in the preparation of plans for the summer field season. Toward the end of June Dr. Roberts again went to the headquarters at Lincoln to assist in the preparations for sending parties to the field and started on an inspection trip through the Missouri Basin in company with Dr. John M. Corbett and Paul Beaubien of the National Park Service. At the end of June the group was at Cherokee, Iowa, where Dr. Reynold J. Ruppe, Jr., of the University of Iowa, was directing a joint party of the University and the Sanford Museum in excavations at an archeological site on Mill Creek.

At the beginning of the fiscal year Dr. Henry B. Collins, anthropologist, was in the Canadian Arctic, conducting archeological work on Southampton Island in Hudson Bay. The expedition was sponsored jointly by the Smithsonian Institution, the National Geographic Society, and the National Museum of Canada. Dr. Collins was assisted by Dr. J. N. Emerson, assistant professor of anthropology, University of Toronto, William E. Taylor, Jr., research assistant, Museum of Anthropology, University of Michigan, and Eugene Ostroff, photographer, of Washington, D. C.

The party left Coral Harbour, Southampton Island, on June 25, traveling by dog team over the sea ice, and camped for the greater part of the summer at Native Point, 40 miles down the coast. This abandoned Eskimo village of 85 stone and sod house ruins was once the principal settlement of the Sadlermiut Eskimos, who became extinct in 1903. Excavation of selected house ruins, graves, and midden areas yielded a valuable collection of cultural and skeletal material of this little-known Eskimo tribe.

One mile from the Sadlermiut site, on an 85-foot elevation and almost a mile from the sea, is a much older site of the Dorset culture, probably 1,000 years or more old. Covering an area of well over 20 acres, this is the largest Dorset site thus far known. Excavations there yielded thousands of artifacts of stone, ivory, and bone, some of them typically Dorset, others representing types that were new to the Dorset culture. The site represents a phase of Dorset culture different in certain respects from any previously reported. Among the new types were several forms of microlithic blades recalling those of the upper Paleolithic and Mesolithic of Eurasia but not previously found in America. Wood was entirely absent at the site, having disintegrated, and the bird and mammal bones and the ivory, bone, and antler artifacts were uniformly patinated and weathered, in striking contrast to

the fresh, well-preserved similar material from the Sadlermiut site. This suggests a considerable age for the Dorset site and bears out other indications that the Dorset culture in Canada and Greenland flourished at a time when the climate was milder than today.

Over 45,000 mammal bones were excavated at the Dorset and Sadlermiut sites, and of these some 6,000 were identified in the field. One result was the demonstration of some striking differences in the food economy of the Dorset and Sadlermiut people. Twenty graves containing complete skeletons were excavated, and an additional 15 unassociated skulls were collected. In mid-July a trip was made by Eskimo boat to Coats Island where two Sadlermiut houses were excavated.

A preliminary report illustrating and describing the results of the Southampton investigations was prepared for publication. Another article was prepared describing the current status of Arctic archeology, results accomplished, and problems toward which research should be directed.

Dr. Collins continued to serve as a member of the Research Committee of the Arctic Institute of North America and of the subcommittee responsible for planning and supervising the scientific work of the Point Barrow Laboratory, operated by the Office of Naval Research. He also continued as chairman of the directing committee supervising the work of the *Arctic Bibliography*, which the Arctic Institute is preparing for the Department of Defense, under an Office of Naval Research contract, with funds provided by the Department of the Air Force. Volume 4 of *Arctic Bibliography*, 1,591 pages, was issued by the Government Printing Office in August 1954. It lists and describes the contents of 7,627 publications in all fields of science relating to the Arctic and sub-Arctic regions of America and Eurasia. The material, which is extensively indexed and cross-indexed according to subject and geographical locality, covers papers published in English, Russian, Scandinavian, and other languages. Volume 5 of the bibliography, containing analysis of contents of 5,494 publications, was issued in April 1955. Though all fields of science are included, volume 5 gives special emphasis to health and disease in the Arctic, environmental effects, and anthropology, particularly the native peoples of northern Siberia and Europe. Material for volume 6 was turned over to the printer on June 20, 1955.

On June 6, 1955, Dr. Collins left again for Southampton Island, to continue the excavations begun last year. The work is being sponsored by the National Museum of Canada and the Smithsonian, with a grant received from the American Philosophical Society.

At the beginning of July, Dr. Philip Drucker was at his official station in Washington, D. C., preparing a report on field researches

completed during the previous year. The report, entitled "Modern Inter-tribal Organizations on the Northwest Coast," was later submitted to, and accepted by, the Arctic Institute of North America, the foundation that supported the major portion of the research, with supplementary financial assistance from the American Philosophical Society and the Smithsonian Institution. During the same interval he also completed a theoretical paper on "The Sources of Northwest Coast Culture," for publication in the *New Interpretations of Aboriginal American Culture History*, 75th Anniversary Volume of the Anthropological Society of Washington.

Thanks to the liberal support of the National Geographic Society, it was possible to plan an ample program of archeological research at the important Olmec site of La Venta, Tabasco, Mexico. Plans were drawn up for a cooperative project, in which the National Geographic Society, the Smithsonian Institution, and the University of California were to participate. Dr. Drucker, representing the Smithsonian Institution, and Dr. Robert F. Heizer, of the University of California and honorary research associate of the Smithsonian, were to function as coleaders of the expedition. During the latter part of November and early in December, Dr. Drucker made a preliminary trip to La Venta to obtain clearances from local, civil, and military authorities, recruit labor, select a camp site, and negotiate other details. On January 10 he left Washington to initiate the work, being joined on February 1 by Dr. Heizer and two of the latter's graduate students serving as archeological assistants. An additional member of the party was Ing. Eduardo Contreras S., assistant archeologist and representative of the Instituto Nacional de Antropología e Historia de México. In passing, due tribute must be given the officers of this organization, whose whole-hearted cooperation made the fieldwork possible.

The primary aim of the expedition was to carry out architectonic investigations at La Venta, since in past years National Geographic Society-sponsored parties have recovered a good deal of information on Olmec ceramics and art. Excavations were restricted almost exclusively to the ceremonial enclosure, where tests in previous years had shown a variety of structures to exist. Working through a 3½-month season with a crew of about 50 local laborers, the party excavated a series of structures of the ceremonial enclosure complex. It proved possible to identify a series of constructional phases in each of the individual structures and to work out a correlation of the phases throughout the ceremonial enclosure. From the drift-sand overburden that covered the structures, materials were recovered pertaining to one, or possibly two, post-Olmec occupations of the site. Determination of the cultural affiliations of these later inhabitants is of

special interest. Carbon samples from post-Olmec deposits and from various structural phases of the Olmec occupation were collected for the purpose of obtaining accurate C-14 dates of the phases and periods.

In addition, a series of offerings were found, consisting of objects of pottery, jade, serpentine, hematite, quartz crystal, and other minerals, which add considerably to the stock of available knowledge of Olmec art and technology.

At the end of the fiscal year, Dr. Drucker was at the Museo Nacional de Antropología in Mexico, D. F., studying the collections made during the field season.

RIVER BASIN SURVEYS

(Prepared by FRANK H. H. ROBERTS, Jr., Director)

The River Basin Surveys continued investigations in cooperation with the National Park Service and the Bureau of Reclamation of the Department of the Interior, the Corps of Engineers of the Department of the Army, and various State and local institutions. Because of a further curtailment of funds the Inter-Agency Salvage Program did not produce as extensive results as in former years. During the fiscal year 1954-55 the work of the River Basin Surveys was financed by a transfer of \$52,700 from the National Park Service to the Smithsonian Institution. The funds were entirely for use in the Missouri Basin. An additional carryover of \$3,691.44 made a total of \$56,391.44 for operations in the area. That amount was approximately 25 percent less than moneys available for the preceding year, which also had suffered a drastic reduction. As a consequence, there was a corresponding progressive decrease in the program.

Field investigations during the year consisted mainly of excavations. On July 1, 1954, three parties were in the field; two were doing intensive digging—one in the Fort Randall area in South Dakota and one in the Garrison Reservoir area in North Dakota, and the third, also operating in the Fort Randall basin, was engaged in test excavations at a number of sites. In each case some reconnaissance work was carried on, but that constituted only a minor activity. At the end of the fiscal year no parties were in the field, but preparations were under way to send out three groups for intensive digging operations in two reservoir areas. Because of lack of funds no paleontological studies were made during the year and none were planned for fiscal 1956.

By June 30, 1955, areas where archeological surveys had been made or excavations carried on since the start of actual fieldwork in the summer of 1946 totaled 243 located in 27 States. In addition, one lock project and four canal areas had also been investigated. As a

result some 4,345 sites have been located and recorded. Of that number 852 were recommended for excavation or limited testing. Preliminary appraisal reports were completed for all the reservoirs surveyed, and where additional reconnaissance has resulted in the discovery of other sites supplemental reports have been prepared. During the course of the year one such report was issued. Since the start of the program 180 reports have been distributed. The difference between that figure and the total number of reservoir areas investigated is in part due to the fact that where several reservoirs form a unit in a single subbasin they are included in one report.

At the end of the fiscal year 324 sites in 44 reservoir basins located in 17 different States had been dug either extensively or in part. In some of the reservoir areas only a single site was excavated while in others a whole series was examined. At least one example of each type of site found in the preliminary surveys has been investigated. In previous years the results of certain phases of that work appeared in technical journals and in Bulletin 154 of the Bureau of American Ethnology. Six manuscript reports on earlier excavation work were completed during the present year and are ready for publication. One major technical report was issued in December as Bulletin 158 of the Bureau of American Ethnology, and a summary statement of the program in the Missouri Basin for the years 1950-51 appeared in April 1955 in the Smithsonian Miscellaneous Collections.

The reservoir projects that have been surveyed for archeological remains as of June 30, 1955, were distributed as follows: Alabama, 1; California, 20; Colorado, 24; Georgia, 5; Idaho, 11; Illinois, 2; Kansas, 10; Kentucky, 2; Louisiana, 2; Minnesota, 1; Mississippi, 1; Montana, 15; Nebraska, 28; New Mexico, 1; North Dakota, 13; Ohio, 2; Oklahoma, 7; Oregon, 27; Pennsylvania, 2; South Dakota, 9; Tennessee, 4; Texas, 19; Virginia, 2; Washington, 11; West Virginia, 2; and Wyoming, 22.

Excavations have been made or were under way in reservoir basins in: California, 5; Colorado, 1; Georgia, 4; Kansas, 3; Montana, 1; Nebraska, 1; New Mexico, 1; North Dakota, 4; Oklahoma, 2; Oregon, 3; South Carolina, 1; South Dakota, 3; Texas, 7; Virginia, 1; Washington, 4; West Virginia, 1; and Wyoming, 2. The foregoing figures include only the work of the River Basin Surveys or that in which there was direct cooperation with local institutions. Projects that were carried on by local institutions under agreements with the National Park Service are not included because complete information about them is not available.

Throughout the year the National Park Service, Bureau of Reclamation, Corps of Engineers, and various State and local institutions continued to provide helpful cooperation in the Inter-Agency Salvage



1. Operations of River Basin Surveys. Exposed floor areas being taken from top of tall ladder. Rising waters of Fort Randall Reservoir appear in background.



2. Operations of River Basin Surveys. Portion of the Oldham site as seen from the ladder. Holes in floor of area in left foreground outline former circular earth lodge. Entire site is now under water.



1. Operations of River Basin Surveys. Tracing floor of earth lodge at village site near Chamberlain, S. Dak. Missouri River in background. Area has since been destroyed.



2. Operations of River Basin Surveys. Mechanical equipment was used successfully in removing upper part of fill from house pits and for excavating long trenches.

Program and furnished valuable assistance to the River Basin Surveys. In several cases mechanical equipment was made available by the construction agency, and at other projects temporary office and laboratory space was provided. Transportation and guides were furnished in a number of instances. The River Basin Surveys men received helpful assistance from the field personnel of the other agencies, and for that reason their accomplishments were much greater than would otherwise have been the case. As in previous years the National Park Service served as the liaison between the various agencies both in Washington and in the field. It also was mainly responsible for preparing estimates and justifications and procuring funds to support the investigations. The wholehearted cooperation of Park Service personnel greatly aided all phases of the operations.

The main office in Washington continued general supervision over the work, while the field headquarters and laboratory at Lincoln, Nebr., was responsible for the activities in the Missouri Basin. The materials collected by excavating parties in the Missouri Basin were processed at the Lincoln laboratory. During the year there was a general distribution of specimens and materials from the laboratory to the U. S. National Museum and to various State and local agencies. The only activities outside the Missouri Basin pertained to the completion of reports on work done in previous years and a brief check on the status of two construction projects in Tennessee.

Washington office.—The main headquarters of the River Basin Surveys, at the Bureau of American Ethnology, continued under the direction of Dr. Frank H. H. Roberts, Jr. Carl F. Miller, archeologist, was based at that office and from time to time assisted the director in general administrative problems.

At the start of the fiscal year Mr. Miller was in the office continuing his studies on the material obtained at the John H. Kerr (Buggs Island) Reservoir on the Roanoke River in southern Virginia and in the preparation of his report on the results of investigations at that locality. During the fall and winter months he completed a manuscript, "Reevaluation of the Eastern Siouan Problem with Particular Emphasis on the Virginia Branches: the Occaneechi, Saponi, and Tutelo." He also presented papers before several archeological societies and interested study groups. In June, at the request of the Bureau of American Ethnology, he made a brief trip to visit and examine various Archaic and Paleo-Indian sites in Alabama and Tennessee. He made an examination of Russell Cave in Jackson County, Ala., where three and possibly four occupation levels are present. He also visited several Paleo-Indian sites in the vicinity of Decatur and Huntsville, Ala., and studied collections of materials that had been obtained

from them. From Alabama Mr. Miller went to Nashville, Tenn., and after conferring with the Corps of Engineers officers in that city proceeded to the Cheatham and Old Hickory projects on the Cumberland River to determine the exact status of the reservoir pools in relation to the archeological sites in their basins. En route from Tennessee to Washington Mr. Miller stopped in Georgia and picked up materials collected during the course of investigations at the Allatoona Reservoir and brought them to the National Museum. At the end of June Mr. Miller was making preparations to proceed to Montana to conduct excavations in the Tiber Reservoir area on the Marias River.

Columbia Basin and Texas.—The River Basin Surveys did no field-work in these areas during the fiscal year, but two technical reports on previous investigations were completed and submitted for publication. Joel L. Shiner, formerly in charge of the River Basin Surveys field headquarters at Eugene, Oreg., and now an archeologist with the National Park Service, turned in a manuscript, "The McNary Reservoir, a Study in Plateau Archeology," based on the results of excavations at nine sites. Edward B. Jelks, who was in charge of the field headquarters at Austin, Tex., before it was transferred to the National Park Service and who is still an archeologist with that organization, completed a report, "Excavations at Texarkana Reservoir, Sulphur River, Texas," detailing the results of the digging at three sites. As his duties at the Lincoln, Nebr., office permitted, Robert L. Stephenson continued work on his "Archeological Investigations in the Whitney Reservoir Area, Hill County, Texas." Mr. Stephenson made the excavations on which it is based before transferring to the Missouri Basin.

Missouri Basin.—Throughout fiscal 1955 the Missouri Basin Project continued to operate from the field headquarters at Lincoln, Nebr. Robert L. Stephenson served as chief of the project from July 1 to September 3, when he was granted leave of absence to complete academic work on an advanced degree at the Department of Anthropology, University of Michigan. After Mr. Stephenson's departure, G. Hubert Smith took over direction of the project as archeologist in charge. Activities during the year were concerned mainly with excavations, the processing of the collections obtained from the digging, analyses and study of the materials, the preparation of general and technical manuscripts on the results, and the publication and dissemination of scientific and popular reports. At the beginning of the fiscal year the Missouri Basin Project had a permanent staff of twelve persons. There were two temporary part-time employees assisting in the laboratory. During July, August, and part of September, 1 temporary assistant archeologist and 24 temporary student and local non-student laborers were employed in the field. During the field season

three of the regular staff were engaged in excavation activities. The temporary employees were gradually laid off as the excavations and test digging were brought to a close and by the first of October only the permanent staff, a temporary assistant archeologist, and a part-time office worker were on the rolls. By the first of November it became evident that the funds available for 1955 would not permit the continuance of as large a staff and a reduction in force became necessary. As a result on June 30 the staff had been cut to seven persons.

During the year only three River Basin Surveys field parties operated in the Missouri Basin. Two of them were primarily occupied in conducting full-scale excavations while the third was engaged in making a series of test excavations. The latter and one of the full-scale digging parties worked in the Fort Randall Reservoir area in South Dakota while the other excavating party worked in the Garrison Reservoir area in North Dakota. All three parties were in the field at the start of the fiscal year. At the Fort Randall Reservoir, which has been flooding since the closing of the dam in July 1953, excavations were carried on by a group under the direction of Harold A. Huscher at the Oldham Village site where previous digging had revealed evidence for several components but the relationships were not clear. Because of the rising waters of the reservoir pool and unsatisfactory working conditions, the investigations were brought to a close on July 24. The results of the season's efforts clarified the situation at the Oldham site and will make possible a much more satisfactory story of the occupations there in the period A. D. 1500 to 1700. Shortly after the departure of the field party, the Oldham site went under water and will continue to be flooded throughout the indefinite future.

The second party in the Fort Randall area under Paul L. Cooper continued its intensive sampling operations until September 20. During the season 13 sites ranging from the Woodland to the historic periods were studied. The sites varied from small temporary camps to the remains of extensive earth-lodge villages. Several cultural traditions are represented in the material obtained from them. Mr. Cooper had planned to dig at several additional locations but the rising waters of the reservoir prevented his doing so.

During the period the two field parties from the Missouri Basin Project were engaged in the Fort Randall area, a third party representing the Nebraska State Historical Society, led by Marvin F. Kivett, and working under an agreement with the National Park Service, excavated at Crow Creek Village site. The imposing remains of that former fortified earth-lodge village have been well known to students for many years, but it was not until the summer of 1954 and excavations were under way that the presence of a second

village area, also fortified, was established. In the latter, evidence for two occupations, both prehistoric, was found. These are significant because one of them shows definite relationships with cultural materials in Nebraska while the other clearly defines a cultural phase found during an earlier season at another site in the Fort Randall area and which was not well understood. Important data were also obtained on earth-lodge types. In the vicinity of the village areas two burial mounds were tested and information was obtained on burial customs. The work at that location contributed so much to knowledge of aboriginal occupation in that portion of the Missouri Basin that the Historical Society in cooperation with the National Park Service again sent a party to the site on June 14 where it was continuing excavations at the end of the fiscal year.

In June a party from the University of Kansas led by Dr. Carlyle S. Smith proceeded to the Fort Randall Reservoir area to begin excavations under a cooperative agreement with the National Park Service. The Kansas group started digging at a site near Fort Thompson. By the end of the fiscal year they had cut cross trenches and quadrants in the remains of a large earth lodge approximately 52 feet in diameter and had tested several refuse mounds in a nearby field. The materials recovered by the close of the year indicated that the site had relationships with certain occupations at two sites previously excavated in the Fort Randall area. The party planned to continue its operations through the month of July, and the additional information obtained should make possible a better understanding of aboriginal activities in that immediate district.

The River Basin Surveys did no work in the Oahe Reservoir area during the fiscal year, but a party from the South Dakota State Archeological Commission and the W. H. Over Museum, under a cooperating agreement with the National Park Service, carried on excavations directed by Dr. Wesley R. Hurt at a location known as the Swan Creek site. Three and possibly four occupations were found there. The most recent of them represents the historic period. Parts of two fortification ditches with palisades, earth lodges, and caches, and burials of two types were uncovered. The sites proved to be so important and so complex that Dr. Hurt and his party returned there on June 15 and was continuing its excavations at the close of the fiscal year.

In the Garrison Reservoir area at the beginning of the fiscal year a party from the Missouri Basin Project under G. Hubert Smith and a group from the State Historical Society of North Dakota led by Alan R. Woolworth, operating under an agreement with the National Park Service, were continuing their joint investigations at the sites of Forts Berthold I and II and the remains of the aboriginal village

named Like-a-Fishhook. Fort Berthold II had been partially dug by Smith in 1952 and parties from the State Historical Society of North Dakota had carried on studies in the remains of the Indian village during three previous seasons. Toward the close of the 1952 season the North Dakota party found indications of the remains of Fort Berthold I but had no opportunity to study them. Because of lack of funds nothing was done there in the summer of 1953. The plans for the 1954 season included the clearing of several features at Fort Berthold II, excavation of the remains of Fort Berthold I, and some additional digging in the aboriginal area. When the project was brought to a close on July 10 the remains of the original Fort Berthold trading post were fully exposed and the stockade which surrounded the original Indian village had been found and completely defined. The excavations were greatly accelerated by the use of mechanical equipment. Fort Berthold I was built and occupied from 1845 to 1862 and the adjacent Fort Berthold II, which originally was called Atkinson, was occupied from about 1858 to 1890 by both fur traders and American military forces. Like-a-Fishhook Village was situated between the two trading posts and was built about 1845. It was occupied by groups of Mandan, Hidatsa, and Arikara who had joined forces against the Sioux. Information obtained from the digging of the various features in the area has made possible the preparation of the first complete map showing the extent of the two posts and the village and has added considerable information pertaining to the fur trade and other white and Indian contacts during the period involved. The entire area went under water in the spring of 1955.

From Fort Berthold, Woolworth and the State Historical Society party moved farther upstream and excavated the remains of Kipp's Trading Post. The stockade was outlined and the positions and extent of the log buildings originally within the enclosure were determined. A representative collection of objects characteristic of the period was obtained. This supplemented and broadened the information from test excavations made there by a River Basin Surveys party in the fall of 1951. The site is of particular interest because it was occupied for a short time during the winter of 1826-27 when the period of organized trade on the Upper Missouri was just getting under way and because Kipp's Post seemingly was the immediate predecessor of Fort Union which became the great trade capital for that part of the Plains area. After completing the work at that location, the party made some further investigations at Grandmother's Lodge, a site where some preliminary digging had been done during a previous season. Grandmother's Lodge was the traditional dwelling place of the Mandan or Hidatsa supernatural being who was considered to be the patroness of gardens and crops. Investigation of the remains provided data that can be compared with the legendary

story which is one of the important myths of the Indians in that district.

Three detailed technical reports, all pertaining to excavations at sites in the Garrison Reservoir area in North Dakota, were completed and submitted for publication. Considerable progress was made in the preparation of the reports on the results of investigations in one reservoir area in South Dakota, a second reservoir area in North Dakota, and two reservoir areas in Wyoming. In addition several short articles and papers were written and sent to technical journals. Two major manuscripts were printed and distributed and several short articles were published.

During the year the reduced laboratory staff processed 46,602 specimens from 51 sites in 4 reservoir areas. A total of 6,155 catalog numbers was assigned to the series of specimens. The work in the laboratory also included: reflex copies of records, 7,423; photographic negatives made, 685; photographic prints made, 787; photographic prints mounted, 2,854; manuscript prints mounted, 35; transparencies mounted in glass, 362; drawings, tracings, and maps, 110; specimens drawn for illustration, 81; pottery vessels restored, 2; pottery vessel sections restored, 32. Photographic activity was at a minimum because the position of staff photographer left vacant by the death of the photographer at the end of the preceding fiscal year was not filled. However, the photographic laboratory at the Smithsonian Institution in Washington assisted by performing some of the required work. Drafting and specimen illustrating were also at a minimum because there were not sufficient funds to replace the draftsman-illustrator who resigned in October. The laboratory staff devoted considerable time during the fiscal year to transferring analyzed records and special materials to various permanent repositories. In accordance with the policy adopted at the start of the program, various collections and the data pertaining to them were sent to several State and local agencies as well as to the United States National Museum.

Archeological specimens and records from the following were transferred to the division of archeology, U. S. National Museum: Amherst Reservoir, 12 sites; Baldhill Reservoir, 11 sites; Beaver City Reservoir, 4 sites; Box Butte Reservoir, 1 site; Boysen Reservoir, 1 site; Brewster Reservoir, 1 site; Broncho Reservoir, 6 sites; Buffalo Creek (renamed Bison) Reservoir, 1 site; Cushing Reservoir, 2 sites; Devil's Lake Reservoir, 3 sites; Dickinson Reservoir, 3 sites; Enders Reservoir, 5 sites; Erielson Reservoir, 5 sites; Fort Randall Reservoir, 11 sites; Garrison Reservoir, 117 sites; Heart Butte Reservoir, 1 site; Jamestown Reservoir, 1 site (human bone only); Medicine Creek Reservoir (Harry Strunk Lake), 24 sites; Medicine Lake Reservoir, 5 sites; Mullen Reservoir, 8 sites; Niobrara Basin (a series of 10 small

reservoirs), 44 sites; Oahe Reservoir, 8 sites; Red Willow Reservoir, 3 sites; Rock Creek Reservoir, 1 site; Sargent Canal, 4 sites; Tiber Reservoir, 4 sites; sites not in reservoirs: Kansas, 1; Missouri, 1; Montana, 11; Nebraska, 8.

Archeological specimens and records were transferred as follows: From 107 Tuttle Creek Reservoir sites to the Department of Economics and Sociology, Kansas State College. From one site in the Keyhole Reservoir to the Department of Economics and Sociology, University of Wyoming. From one site in the Garrison Reservoir to the Department of Anthropology and Sociology, Montana State University. From 14 sites in the Big Sandy Reservoir to the Department of Anthropology, University of Nebraska. From one site in the Garrison Reservoir to the Nebraska State Historical Society. From 3 sites in the Garrison Reservoir to the North Dakota State Historical Society. Virtually all the material worth preservation from one of the sites, Fort Stevenson, went to Bismarck.

Total number of sites from which archeological specimens were transferred to other organizations in fiscal 1955: 434.

Transfers of archeological specimens made prior to fiscal 1955 and not previously reported: Department of Anthropology, University of Denver, a total of 19 sites representing Bonny, Cherry Creek, Narrows, and Wray reservoirs. Department of Anthropology, University of Nebraska, a total of 11 sites representing Harlan County Reservoir. Museum of Natural History, University of Kansas, a total of 66 sites representing Cedar Bluff, Glen Elder, Kanopolis, Kirwin, Lovewell, Norton, Pioneer, Webster, Wilson, and Wolf Creek reservoirs. Division of archeology, U. S. National Museum, a total of four sites representing Harlan County and Tuttle Creek reservoirs.

Total number of sites from which archeological specimens were transferred prior to fiscal 1955: 100.

As of June 30, 1955, the Missouri Basin Project had transferred to other agencies the archeological specimens from a total of 534 sites. Of these, 513 sites were in 52 reservoirs. Twenty-one sites were not in reservoirs.

In addition to transfers of archeological specimens in site lots, the Missouri Basin Project had, just prior to fiscal 1955, transferred representative series of potsherds to the following agencies: Ceramics Repository, University of Michigan; W. H. Over Museum, University of South Dakota; Museum of Natural History, University of Kansas; Nebraska State Historical Society.

Upper Republican sherds were transferred from Medicine Creek Reservoir sites 25FT13, 17, 39, and 70. Sites 39ST14 and 30, in Oahe Reservoir, furnished sherds of the following wares: Anderson, Foreman, Monroe, and Stanley.

All identified, unworked shell in storage was transferred to the University of Nebraska State Museum in November 1954. Except for specimens in the comparative collection in the Lincoln laboratory, this transfer included all specimens collected prior to 1954. Reservoir distribution is as follows: Amherst, 2 sites; Angostura, 11 sites; Baldhill, 7 sites; Beaver City, 1 site; Bixby, 3 sites; Boysen, 2 sites; Buffalo Creek, 1 site; Canyon Ferry, 7 sites; Cushing, 1 site; Edgemont, 1 site; Fort Randall, 35 sites; Garrison, 13 sites; Glendo, 8 sites; Glen Elder, 13 sites; Harlan County, 8 sites; Heart Butte, 3 sites; Kanopolis, 6 sites; Keyhole, 8 sites; Kirwin, 4 sites; Medicine Creek, 14 sites; Medicine Lake, 1 site; Moorhead, 1 site; Niobrara Basin, 7 sites; Oahe, 58 sites; Sheyenne, 2 sites; Tiber, 5 sites; Tuttle Creek, 10 sites; Wilson, 1 site; not in reservoirs, 3 sites.

Total number of sites from which identified, unworked shell was transferred: 236, of which 233 were in 29 reservoirs and 3 were not in reservoirs.

As of June 30, 1955, the Missouri Basin Project had transferred the identified, unworked animal bone from 453 sites to the University of Nebraska State Museum. No such transfers were made during fiscal 1955. Reservoir distribution of previous transfers is as follows: Amherst, 1 site; Angostura, 34 sites; Baldhill, 2 sites; Big Sandy, 1 site; Bixby, 3 sites; Bonny, 1 site; Boysen, 12 sites; Canyon Ferry, 4 sites; Clark Canyon, 1 site; Des Lacs, 1 site; Devil's Lake, 1 site; Dickinson, 2 sites; Edgemont, 6 sites; Enders, 1 site; Ericson, 1 site; Fort Randall, 85 sites; Garrison, 60 sites; Gavins Point, 1 site; Glendo, 14 sites; Glen Elder, 4 sites; Harlan County, 8 sites; Heart Butte, 5 sites; Jamestown, 7 sites; Kanopolis, 5 sites; Keyhole, 9 sites; Kirwin, 4 sites; Kortes, 1 site; Medicine Creek, 13 sites; Medicine Lake, 2 sites; Moorhead, 5 sites; Mullen, 3 sites; Niobrara Basin, 10 sites; Norton, 1 site; Oahe, 93 sites; Oregon Basin, 9 sites; Red Willow, 1 site; Tiber, 22 sites; Tuttle Creek, 1 site; Wilson, 4 sites; Yellowtail, 3 sites; not in reservoirs, 12 sites.

A special exhibit illustrating and explaining the Missouri Basin Salvage Program was prepared and installed at the Nebraska State Fair held at Lincoln during September. Considerable attention was shown the display by visitors, and numerous requests were received for literature pertaining to the operations of the project and the results obtained from the various excavations. Temporary interpretative displays were also installed from time to time in the windows of the Laboratory in the business section of Lincoln. They attracted favorable attention and numerous passers-by dropped into the office to ask questions about different projects. Much local interest has developed since the Salvage Program has been under way.

Paul L. Cooper, archeologist, was in charge of the intensive testing party in the Fort Randall area from July 1 until September 20. Dur-

ing that time he supervised the digging in 13 sites which were soon to go under water. Mr. Cooper returned to Lincoln on September 22 and during October and the early part of November devoted his time to the study of the materials obtained during the summer and analysis of the information contained in his field notes. He also read proof on his report, "The Archeological and Paleontological Salvage Program in the Missouri Basin, 1950-51," which appeared in April in the Smithsonian Miscellaneous Collections, vol. 12, No. 2. Because of the shortage of funds and the necessity of curtailing the staff of the Missouri Basin Project, Mr. Cooper's employment was terminated November 20 by a reduction-in-force action.

Harold A. Huscher, assistant archeologist, was in charge of the party excavating at the Oldham site in the Fort Randall Reservoir area from July 1 to July 24. He returned to headquarters at Lincoln on July 27. During August, September, and the early part of October he devoted his time to analyzing and studying the materials obtained during the field season and in correlating his results with those of previous seasons' work at the site. He resigned from the Missouri Basin Project on October 15 to return to Columbia University and continue his work on an advanced degree.

George Metcalf, formerly a member of the regular staff of the Missouri Basin Project but now a member of the division of archeology, U. S. National Museum, completed and turned in a manuscript, "Notes on Some Small Sites on and about Fort Berthold Indian Reservation, Garrison Reservoir, North Dakota." The data contained in the manuscript were collected by Mr. Metcalf during several seasons of field-work while a member of various River Basin Surveys parties.

At the beginning of the fiscal year G. Hubert Smith, archeologist, was in charge of the Missouri Basin Project party which was cooperating with the North Dakota State Historical Society party in the Garrison Reservoir where excavations at the sites of Fort Berthold I, Fort Berthold II, and Like-a-Fishhook Village were being brought to completion. The work was finished on July 10 and Mr. Smith proceeded to Bismarck, N. Dak., where he devoted a week to the study of documentary records in the archives of the State Historical Society. Materials there contain considerable information about both of the forts as well as the Indian village and Mr. Smith deemed it advisable to be familiar with the records because of the light they might throw on the evidence obtained by the digging. Mr. Smith was on duty at the Lincoln headquarters from July 19, 1954, to May 20, 1955. From August 16 to August 31, during an absence of Robert L. Stephenson, he served as archeologist in charge. He again took over in the latter capacity from September 3, 1954, until May 20, 1955. While at the project headquarters Mr. Smith revised and completed the draft of his

report on excavations at the site of Fort Berthold II, made largely in 1952 and completed in 1954, and in collaboration with Alan R. Woolworth of the North Dakota State Historical Society prepared a preliminary report of the investigations at the site of Fort Berthold I. Throughout the fall and winter months Mr. Smith talked about salvage archeology before numerous groups in Lincoln. He reported on the current work of the Missouri Basin Project at the 12th Plains Conference for Archeology which was held at Lincoln in November. He also presented a paper at the May meeting of the Nebraska Academy of Sciences. At the request of the Indian Claims Section, Lands Division, Department of Justice, Mr. Smith was detailed to that organization on May 20 to assist in gathering data for an Indian land-claims case. He completed that assignment on June 30. A paper by Mr. Smith, "Excavations at Fort Stevenson, 1951," was published in North Dakota History for July 1954.

Robert L. Stephenson, chief of the Missouri Basin Project, was at the headquarters in Lincoln on July 1. Shortly thereafter he left on a tour of inspection of the field parties working in the Missouri Basin. He accompanied Dr. John M. Corbett and Paul Beaubien of the National Park Service. The party visited the excavations at the Oldham and Crow Creek sites and the several sites under investigation by Paul L. Cooper. It also went to the Swan Creek site in the Oahe Reservoir area. After his return to Lincoln, Mr. Stephenson, in addition to directing the operations of the project, continued work on several technical reports. Mr. Stephenson left the field headquarters at Lincoln on September 3 and proceeded to Ann Arbor, Mich. He was still in leave status at the end of the year.

Richard P. Wheeler, archeologist, returned to the Lincoln headquarters on July 1 from Jamestown, N. Dak., where he had been conducting excavations and making surveys in the Jamestown Reservoir basin. Wheeler remained in the office throughout the fiscal year. He devoted his time to the preparation of reports on the results of his excavations in previous years in the Angostura Reservoir area, South Dakota, the Boysen and Keyhole Reservoir areas in Wyoming, and on the Hintz site in the Jamestown Reservoir area, North Dakota. He also prepared several short articles on specific artifact problems and wrote several reviews for professional journals. His paper, "A Check List of Middle Missouri Pottery Wares, Types, and Subtypes," was published in the *Plains Anthropologist*, No. 2, December 1954. In November Wheeler served as chairman of a symposium on the archeology of the western plains at the 12th Plains Conference for Archeology and read a paper summarizing the results of his investigations in the Jamestown Reservoir area in 1954. In April he served as chairman of the anthropology section at the 65th Annual Meeting of the

Nebraska Academy of Sciences held at the University of Nebraska. At that time he also read a preliminary statement relating to a study of aboriginal dwellings and settlement types in the Northern Plains. During the period when Mr. Smith was absent from the office, Mr. Wheeler performed such duties of the archeologist in charge as were required. At the end of the fiscal year he was preparing to take a field party to the Oahe Dam area in South Dakota where excavations were planned for two sites.

Cooperating institutions.—A number of State and local institutions continued to cooperate in the Inter-Agency Salvage Program throughout the year. Some of the State groups worked independently but correlated their activities closely with the over-all program. A majority of the projects, however, were under agreements between the National Park Service and the various organizations. The Historical Society of Indiana continued making surveys of proposed reservoir areas as part of its general program for archeological studies in that State and made reports on the results of its work. The Ohio State Archeological and Historical Society carried on salvage operations in several localities. In a number of cases the sites involved were not in reservoir areas but the need for the recovery of materials was just as great as though they were ultimately to go under water. The Archeological Survey Association of Southern California continued its voluntary recovery of materials at several projects in the San Diego area, and the University of California Archeological Survey included several proposed reservoir areas in its general survey program.

A number of institutions worked under agreements with the National Park Service. The University of California Archeological Survey had a party under Dr. Adan E. Treganza, research associate, excavating in sites in the Berryessa Valley in the Monticello Reservoir basin in Napa County, California. The area is an important one for linking known Indian groups with specific types of prehistoric remains and the California party obtained valuable information. In the Columbia Basin a party from the University of Oregon, under the direction of Dr. L. S. Cressman, excavated several sites on the Oregon side of the river at The Dalles. At that locality there is a record of long occupation extending possibly from the closing days of the last glacial period to historic times. Dr. Cressman and his associates collected valuable data and interesting specimens in the course of their digging. On the Washington side of the Columbia River, above The Dalles, a party from the University of Washington under Warren Caldwell excavated at the Wakemap Mound, an important site in the area because of its depth and stratified deposits. Parties from the University of Missouri, under the direction of Carl H. Chapman, excavated at a number of sites in the Table Rock Res-

ervoir area, on the White River in Missouri. They investigated five open village locations and one cave. At one site evidences were found for three different Indian occupations. Several cultural complexes were represented in the materials recovered by the excavations. The Table Rock area is important because of the large number of sites occurring there and the variety of cultures represented. It is the only area remaining in which extensive remains of the Ozark Bluff Dwellers are still to be found. Special funds were appropriated for fiscal 1956 for the Table Rock area and the University of Missouri will continue its operations there throughout the year. Mention has already been made of the work of the cooperating institutions in the Missouri Basin. The River Basin Surveys aided the field activities of those groups by the loan of vehicles and other equipment and in one instance by making a survey of the site and preparing a detailed map locating the numerous features involved. One other project in the Missouri Basin consisted of a basin-wide survey of archeological resources by Dr. Jesse D. Jennings of the University of Utah. That also was a cooperative agreement with the National Park Service and while it was not strictly a salvage undertaking, various phases of the survey had a direct bearing on the problems of salvage archeology.

ARCHIVES

The Bureau archives continued during the year under the custody of Mrs. Margaret C. Blaker.

MANUSCRIPT COLLECTIONS

There has been increasing utilization of the manuscript collections of the Bureau during the year by students through personal visit, mail inquiry, and the purchase of photoreproductions. Approximately 225 manuscripts were used by research workers as compared with 150 last year. Visitors frequently express surprise as well as considerable satisfaction at having located little-known, unpublished sources. Publication of at least a skeleton catalog of the collection is being considered.

Additions to the manuscript collection included the personal papers of Alice Cunningham Fletcher and her adopted son, Francis La Flesche, an Omaha Indian, which were deposited with the Bureau by Mrs. G. David Pearlman, Washington, D. C., on indefinite loan. Preliminary examination indicates that the collection contains little unpublished ethnographic data; its principal interest is biographical and historical.

Dr. Frances Densmore made several additions to her personal papers which are in the Bureau, the most substantial being her diaries for 1899 and 1905-50.

The following short manuscripts were received in the past year:

4467. Lyford, Carrie A. "Dolls of the American Indians." N. d. (ca. 1938). 40 pp., 40-50 illus. Deposited by Harry Lyford, brother of the author, Washington, D. C.

4425. Whitaker, C. H. (U. S. Consul, Colón, Panama). "A Report on the Customs of the San Blas Indians." 1954. 38 pp., 62 photographs, 1 map. Forwarded by the U. S. Department of State.

4424. Witthoft, John. "Dakota (?) 'Border and Box' Painted Bison Robe." 2 pp., 1 illus. Forwarded by the author.

A number of manuscripts received in previous years but heretofore uncataloged were arranged, described, and made available for reference, reducing the backlog of such material by about one-third. In this group were the papers accumulated by Dr. John R. Swanton while acting as chairman of the United States De Soto Expedition Commission, 1935-39. These papers contain an extensive series of photocopies of documents in Spanish archives.

Other manuscripts cataloged and now available for general reference are as follows:

4430. Anonymous. Drawings of tipis and robes obtained by George Miller from an Omaha Indian. N. d. 8 pp. Annotated by J. O. Dorsey.

4452. Anonymous. Drawings by Indians of the Southern Plains. Ca. 1880. In two ledger books of 104 numbered pages each. With one-page letter of transmittal from William H. Myer, Washington, D. C., June 3, 1952.

4442. Bonnerjea, Biren. "Folk-lore in Some Languages of Northern India." Address to Anthropological Society of Washington, February, 1933. 18 pp.

4450. Capron, Louis. "The Hunting Dance of the Cow Creek Seminoles, October 1946." 11 pp., 8 illus.

4444. Carter, John G. (recorder). "Picture Writing of the North American Indians Translated by Richard Sanderville, Chief Bull, a member of the Blackfeet tribe of Indians of Montana, at the Bureau of American Ethnology . . . June 13 to June 18, 1934, from material furnished by the Bureau." 27 pp., 5 illus.

4445. Carter, John G. "Statement of Robert Friday of Fort Washakie, Wyoming, member of Arapaho tribal council, concerning his grandfather, Friday." Washington, D. C., 1938. 3 pp., typed.

4446. Carter, John G. "Statements by Gilbert Day, a Shoshone Indian of Fort Washakie in regard to the Peyote Church among the Shoshone Indians." Washington, D. C., 1938. 22 pp.

4447. Carter, John G. "Memorandum on the Proper Usage of the Word 'Blackfoot' or 'Blackfeet' as Applied to the Siksika, Kainah and Pikuni, or Blackfoot, Blood, and Piegan Tribes." N. d. 8 pp.

4448. Carter, John G. "Big Snake, Oh-muck-see Sin-a-kwan, or Loud Voice, also Called Black Snake Man, a Piegan Indian Chief." N. d. 15 pp.

4451. Cleveland, A. G. "The San Blas Coast." N. d. 77 pp. Also miscellaneous items relating to the Cuna and Tule Indians, including a notebook of picture writing and 8 pp. of interpretations.

4438. Clifford, Capt. Walter. "The Indian Campaign of 1876." Chapters written for the *Rocky Mountain Husbandman*. N. d. About 50 pp., unarranged.

_____. "Notes at Random." Journal, Oct. 6, 1879-Nov. 4, 1879. Copy. 15 pp.

4433. Cuoc, Jean Andre. Mohawk-French Dictionary. N. d. 1 vol., 973 pp. Dialect spoken at Lake of Two Mountains, Caughnawaga, and St. Regis in Quebec, Canada.

4436. Fenton, William Nelson. Papers accumulated while acting as representative of the Smithsonian Institution on the Policy Board of the National Indian Institute, 1948-50. About 80 pp.

4429. Giroux, Louis J. "Sketch of the Mayo and Yaqui Indians, who are helping to fight Carranza." Nogales, Ariz (sic), 1920. 5 pp.

4463. Harrington, John P. "The Indian Place Names of Maine." 1949. 2 boxes, contents itemized in catalog.

4421. Genealogical chart by Hewitt showing his ancestry. 3 oversize sheets.

4459. (Lee, Dale?). Field plans and profiles of Murphy Mound, North Carolina. N. d. (W. P. A. period.) Miscellaneous oversize sheets in 1 roll.

4435. Newcomb, Franc J. "Navaho Ceremonies." Observations made on Navaho Reservation, Newcomb, N. Mex., 1939. About 80 pp., with snapshots, drawings, and botanical samples.

4441. (Schoolcraft, Henry Rowe?). "The Age of Science: A Satire in Ten Numbers." Verses to Washington Irving, George Bancroft, B. Butler, John Torrey, Frederick Hall, Dr. Skinner, Charles F. Hoffman, John A. Dix, Henry Inman, and Lewis Cass. 1840. About 42 pp.

4437. Snider, G. L. "A Maker of Shavings." Manuscript based on information from Edward Forte, known to the Indians of Standing Rock Agency as Chau Cozhepa (A Maker of Shavings), formerly First Sgt., Troop "D," 7th Cavalry, and said to be the last white man who talked with Sitting Bull. With miscellaneous notes, including 4-page statement by Sgt. Forte, 12-page letter from Forte to Frank Fiske, Oct. 21, 1932, and 4 photographs.

4432. Stirling, Matthew W. Field notes on archeological work in the vicinity of Mobridge, S. Dak., 1923, with extracts from various sources. 150-200 pp.

4439. Swanton, John R. "The Psi Capacities." Discussion of extrasensory perception. Ca. 1950. 94 pp.

4443. Tauber, Charles. "Entzifferung der Osterinsel-Hieroglyphen." 36 pp. (In German.)

4434. Taylor, Douglas. "Notes on the Carib of Dominica." Text, notes, anthropometric data, photographs, drawings, and correspondence received 1938-40.

4440. Verrill, John. "Results of Preliminary Survey of the Archeology and Ethnology of the Atrato Valley of Colombia, South America." 27 pp. Cuna glossary, 8 pp. Glossary with ethnographic notes, tribe unidentified, 11 pp. 5 maps. About 59 snapshots of Cuna and Choco Indians, with 8 pp. of captions and background information. N. d. Received 1933.

4431. Woodbury, George. "Preliminary Report on Excavation of Mortuary Mounds in Brevard County, Florida East Coast." Archeological Report of CWA Project 5-F-70, Dec. 18, 1933-Feb. 15, 1934. 12 pp., 11 maps, about 200 photographs (mainly uncaptioned).

Additional progress was made in the amplification of the catalog by preparing new and detailed descriptions of manuscripts that had been only briefly listed in the original catalog many years ago. The usefulness of the catalog has been increased by cross-referencing the additional subjects.

A number of nonmanuscript items, which had previously been housed in the archives, were transferred to more suitable repositories. Among these were wax cylinder recordings of Indian songs, which were transferred to the Bureau's record deposit in the music division of the Library of Congress. Ten cylinders contained Hopi songs recorded about 1900 and bore descriptive labels largely unintelligible except to a specialist in the Hopi language. Dr. Frederick Dockstader, a Hopi specialist, assisted in the interpretation of these labels before the recordings were sent to the Library.

A collection of mounted plant specimens unrelated to ethnological studies collected by Dr. A. E. Jenks early in his professional career were transferred to the University of Minnesota, with which Dr. Jenks was long associated.

PHOTOGRAPHIC COLLECTIONS

Public interest in the photographic collections continues to grow. Additions to the photographic collection included an album of photographs relating principally to Indians made by William S. Soulé in the vicinity of Fort Dodge, Kans., Camp Supply, Okla., and Fort Sill, Okla., in 1867-74. Although numerous examples of the fine work of this frontier photographer have long been in the Bureau, and have appeared in Bureau publications, the new volume is notable in that it belonged to the photographer and contains captions written by him. It also contains a number of prints not previously received, including a likeness of Soulé himself. The photographs were presented by Miss Lucia A. Soulé of Boston, the daughter of the photographer.

A group of 32 negatives made on the Madeira, Tapajoz, and Xingú Rivers, Brazil, in 1911-12, were presented by the photographer, Francisco von Teuber, engineer. They include views of the country and the Indians of the region.

Copy negatives were made for the Bureau files of a number of photographs from the personal collection of the late A. K. Fisher, well-known naturalist. The photographs were lent by Dr. Fisher's daughter-in-law, Mrs. Walter K. Fisher, of Pacific Grove, Calif., before she donated Dr. Fisher's personal papers, including photographs, to the Manuscript Division of the Library of Congress.

Photographs copied include views of Tlingit and Haida villages on the Alaskan coast and of habitations at Plover Bay, Siberia, all made on the Harriman Expedition to Alaska in 1899. A few photographs of Hawaiians made by H. W. Henshaw about 1900 and a series of photos made and collected by E. W. Nelson in Mexico in 1902 were also copied.

A group of commercial portraits of Indians, collected by Gen. E. R. Kellogg while in command at Fort Washakie, Wyo., about 1891, was donated by his daughter, Mrs. Robert Newbegin, of Toledo, Ohio.

Two important sets of photographs were obtained for reference purposes from other institutions (which retain the negatives and the right to grant publication permission). The first is a set of 86 photographs of paintings of Indians by Paul Kane and a microfilm copy of Kane's sketchbook, made on his trip across the continent to the Pacific Northwest in 1845-48. The photographs were purchased from the Royal Ontario Museum of Archaeology, Toronto, which owns the original paintings. The second reference collection consists of approximately 400 copy prints of photographs relating to the Indians of the Plains made by Stanley J. Morrow in the 1870's and 1880's. The prints were received from the W. H. Over Museum of the University of South Dakota, through the River Basin Surveys.

In addition to photographs recently received from sources outside the Bureau, a collection of some 1,000 photographic prints made in the years 1880-1905 and representing about 130 Indian tribes was transferred from the photographic laboratory. A number of researchers have benefited this year from the newly available material, and copy negatives are being made as required.

Another project making available additional photographic resources in the Bureau was begun in the past year. It was found that a number of former staff members and collaborators had deposited rather extensive series of snapshot and other small negatives. Most of these were in labeled jackets, now deteriorating, and were without prints.

Prints were requisitioned for some 260 of James Mooney's negatives of Arapaho, Kiowa, Comanche, Navaho, and Cherokee; by the end of the year about half of these had been sorted and arranged with proper identification, and placed in protective vinylfilm albums. It is hoped that in time similar groups of photographs by M. C. Stevenson, W J McGee, W. H. Holmes, F. W. Hodge, A. E. Jenks, J. O. Dorsey, and others may be processed in the same way.

ILLUSTRATIONS

Throughout the year work was continued by E. G. Schumacher, illustrator, on drawings, charts, maps, diagrams, and sundry other illustrative tasks concerning the publications and work of the Bureau of American Ethnology, including the River Basin Surveys. He also made a variety of drawings for other branches of the Institution.

EDITORIAL WORK AND PUBLICATIONS

There were issued 1 Annual Report and 4 Bulletins, as follows:
Seventy-first Annual Report of the Bureau of American Ethnology, 1953-1954.
ii+17 pp. 1955.

Bulletin 157. Anthropological Papers, Nos. 43-48. iii+415 pp., 76 pls., 23 figs. 1955.

- No. 43. Stone monuments of the Rio Chiquito, Veracruz, Mexico, by Matthew W. Stirling.
- No. 44. The Cerro de las Mesas offering of jade and other materials, by Phillip Drucker.
- No. 45. Archeological materials from the vicinity of Mobridge, South Dakota, by Waldo R. Wedel.
- No. 46. The original Strachey vocabulary of the Virginia Indian language, by John P. Harrington.
- No. 47. The Sun Dance of the Northern Ute, by J. A. Jones.
- No. 48. Some manifestations of water in Mesoamerican art, by Robert L. Rands.

Bulletin 158. River Basin Surveys Paper No. 7. Archeological investigations in the Oahe Dam area, South Dakota, 1950-51, by Donald J. Lehmer. xi+190 pp., 22 pls., 56 figs., 6 maps. 1954.

Bulletin 159. The horse in Blackfoot Indian culture, with comparative material from other western tribes, by John C. Ewers. xv+374 pp., 17 pls., 33 figs., 1955.

Bulletin 160. A ceramic study of Virginia archeology, by Clifford Evans. With an appendix: An analysis of projectile points and large blades, by C. G. Holland. viii+196 pp., 30 pls., 23 figs., 1 chart. 1955.

The following publications were in press at the close of the fiscal year:

Bulletin 161. Seminole music, by Frances Densmore.

Bulletin 162. Guaymí grammar, by Ephraim S. Alphonse.

Bulletin 163. The Diné: Origin myths of the Navaho Indians, by Aileen O'Bryan.

Publications distributed totaled 24,533 as compared with 21,222 for the fiscal year 1954.

COLLECTIONS

Acc. No.

- 202531. Archeological materials consisting of potsherds collected by Dr. Matthew W. Stirling on Taboguilla Island in 1953.
- 203786. Insects, 95 mammals, and 15 marine invertebrates from Southampton and Coats Islands collected by National Geographic Society, National Museum of Canada, and Smithsonian Institution Expedition, 1954, led by Dr. Henry B. Collins.
- 204571. 385 plants collected by James Mooney at Cherokee Reservation, Qualla, N. C., in 1888.
- 205978. Models of heraldry, peyote and game equipment, collected by James Mooney among the Kiowa Indians.
- 206445. 1 badger from New Mexico.

FROM RIVER BASIN SURVEYS

- 202135. Archeological material from the Allatoona Reservoir area on the Etowah River, Cherokee, Bartow, and Cobb Counties, Ga.
- 202358. 327 specimens of archeological material consisting of potsherds, copper, stone, bone, and shell objects, from 3 sites in Tuttle Creek Reservoir, Pottawatomie County, Kans., collected by Missouri Basin Project field parties in 1952-53.

202532. 120 archeological specimens from site 35-WS-5, Dalles Reservoir on Columbia River, Wasco County, Oreg.

202537. Archeological materials from the Conomaugh Reservoir, Pennsylvania, scattered sites in Marshall and Wetzel Counties, W. Va., and Cheatham and Old Hickory Reservoirs, Tenn., collected by Ralph S. Solecki, 1950 and 1954.

203964. Archeological material from 2 sites in Cachuma Reservoir areas on Santa Ynez River, Santa Barbara County, Calif.

205436. Archeological material in and about Broncho Reservoir, Mercer County; Dickenson Reservoir Area, Stark County; Kochler site, Heart Butte Reservoir, Grant County, all in North Dakota.

205437. 21,046 archeological specimens from 2 sites in Oahe Reservoir, Stanley County, S. Dak.

205438. Archeological material from sites in and about Garrison Reservoir, in Dunn, Mercer, McLean, Mountrail, and Williams Counties, N. Dak.

205526. 797 archeological specimens from Allatoona Reservoir area, Cherokee County, Ga.

206347. 3,648 archeological specimens from Montana, collected by the Missouri Basin Project.

MISCELLANEOUS

Dr. Frances Densmore, Dr. John R. Swanton, Dr. Antonio J. Waring, Jr., and Ralph S. Solecki continued as collaborators of the Bureau of American Ethnology. Dr. John P. Harrington is continuing his researches with the Bureau as research associate. On April 12, 1955, Sister M. Inez Hilger, an ethnologist and a teacher at the School of Nursing, Saint Cloud Hospital, Saint Cloud, Minn., was appointed an honorary research associate of the Smithsonian Institution.

Information was furnished during the past year by members of the Bureau staff in reply to numerous inquiries concerning the American Indians, past and present, of both continents. The increased number of requests from teachers, particularly from primary and secondary grades, from Scout organizations, and from the general public, indicates a continuously growing interest in the American Indian. Various specimens sent to the Bureau were identified and data on them furnished for their owners.

Respectfully submitted.

M. W. STIRLING, *Director.*

Dr. LEONARD CARMICHAEL,
Secretary, Smithsonian Institution.

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Seventy-third Annual Report

of the

**BUREAU OF AMERICAN
ETHNOLOGY**

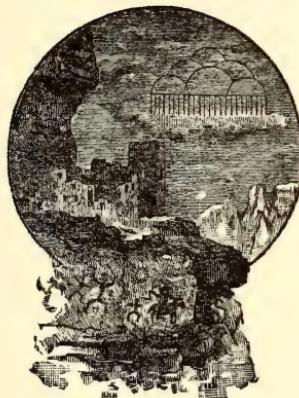
1955-1956



**SMITHSONIAN INSTITUTION
WASHINGTON
D. C.**

SEVENTY-THIRD
ANNUAL REPORT OF THE
BUREAU OF
AMERICAN ETHNOLOGY
TO THE SECRETARY OF THE
SMITHSONIAN INSTITUTION

1955-1956



UNITED STATES
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BUREAU OF AMERICAN ETHNOLOGY

June 30, 1956

Director.—MATTHEW W. STIRLING.

Associate Director.—FRANK H. H. ROBERTS, JR.

Anthropologists.—H. B. COLLINS, JR., WILLIAM C. STURTEVANT.

Collaborators.—FRANCES DENSMORE, JOHN R. SWANSON, A. J. WARING, JR., RALPH S. SOLECK.

Research Associate.—JOHN P. HARRINGTON.

Archives Assistant.—MARGARET C. BLAKER.

Scientific Illustrator.—E. G. SCHUMACHER.

RIVER BASIN SURVEYS

Director.—FRANK H. H. ROBERTS, JR.

Archeologists.—CARL F. MILLER, G. HUBERT SMITH, ROBERT L. STEPHENSON, RICHARD P. WHEELER.

SEVENTY-THIRD ANNUAL REPORT
OF THE
BUREAU OF AMERICAN ETHNOLOGY

M. W. STIRLING, *Director*

SIR: I have the honor to submit the following report on the field researches, office work, and other operations of the Bureau of American Ethnology during the fiscal year ended June 30, 1956, conducted in accordance with the Act of Congress of April 10, 1928, as amended August 22, 1949, which directs the Bureau "to continue independently or in cooperation anthropological researches among the American Indians and the natives of lands under the jurisdiction or protection of the United States and the excavation and preservation of archeologic remains."

SYSTEMATIC RESEARCHES

Dr. M. W. Stirling, Director of the Bureau, remained in Washington during the major portion of the fiscal year. In addition to regular administrative duties, he continued studies on the archeological collections made in Panama during 1952 and 1953. In May and June he made two brief inspection trips to Russell Cave in Jackson County, Alabama, where Carl Miller conducted archeological excavations under the auspices of the Bureau and financed by the National Geographic Society. The services of Mr. Miller were lent to the Bureau by the River Basin Surveys for six weeks, the duration of this work. The excavations, which reached a depth of 14 feet in the cave floor, gave evidence of a fairly continuous occupation which extended from approximately A. D. 1650 to the early Archaic. Samples from the 14-foot level yielded a carbon-14 date of 8160 B. P. (before the present) \pm 300.

The beginning of the fiscal year found Dr. Frank H. H. Roberts, Jr., Associate Director of the Bureau and Director of the River Basin Surveys, on an inspection trip in the Missouri Basin. He visited survey and excavation parties working in the Oahe Reservoir basin in North Dakota and South Dakota and the Fort Randall Reservoir area, also in South Dakota. After his return to Washington he devoted practically full time to the management of the River Basin Surveys program and in reviewing and revising a number of manuscript reports on the results of investigations in various areas. In October Dr. Roberts went to Clarksville, Mo., to attend the annual fall meeting of the Missouri Archeological Society. He spoke at one of the sessions on the subject "The Inter-Agency Archeological Salvage

Program." From Clarksville he proceeded to the field headquarters at Lincoln, Nebr., where he reviewed the results obtained by the field parties, working in the Missouri Basin during the summer and early fall months. Following his return to Washington he participated in the annual meeting of the Committee for the Recovery of Archeological Remains. During the winter and early spring months Dr. Roberts worked on the manuscript of an article summarizing the activities and the results of the archeological salvage program for the 10 years that it has been operating. In May he went to the Lincoln office to assist in the preparation of plans for the summer's fieldwork in the Missouri Basin. He was in the Washington office at the end of the fiscal year.

During the first two months of the fiscal year Dr. Henry B. Collins, anthropologist, with three assistants conducted archeological field-work on Southampton and Walrus Islands in Hudson Bay. The work was sponsored by the Smithsonian Institution and the National Museum of Canada and was supported in part by a grant from the American Philosophical Society. The party, consisting of Dr. Collins, Dr. J. N. Emerson, University of Toronto, William E. Taylor, Jr., National Museum of Canada, and James V. Wright, anthropology student at the University of Toronto, left Montreal by R. C. A. F. aircraft on June 8, 1955, and arrived at Coral Harbour, Southampton Island, the following day. On June 13 they went by Eskimo dog team over the sea ice to Native Point, an abandoned Eskimo village site 40 miles down the coast, where they camped for the summer. Native Point (Tunermiut) was the principal settlement of the Sadlermiut, the aboriginal Eskimo tribe of Southampton Island, the last of whom died there in an epidemic in the winter of 1902-3. The site consists of the ruins of 75 semisubterranean stone and sod houses in addition to a dozen old "quarmats" or autumn houses built by the Aivilik Eskimos who have camped there in recent years. Hundreds of stone graves, cairns, and meat caches lie along the beach near the site and on the old shorelines in every direction for miles around. Excavation of house ruins, middens, and graves at the main Sadlermiut site and two smaller sites nearby supplemented the work of the previous year and provided an adequate picture of the material culture and way of life of the Sadlermiut Eskimos. The Sadlermiut are commonly thought to have been descended from the Thule Eskimos who migrated from Alaska to Canada and Greenland some seven or eight hundred years ago. However, from the work on Southampton and Walrus Islands it seems more likely that the Sadlermiut had merely been influenced in some ways by the Thule culture and that they were actually the descendants of the prehistoric Dorset Eskimos, who were the other, and principal, object of study by the expedition.

The main Dorset site at which excavations were made lies a mile to the east of the Sadlermiut site. It is situated on the gently sloping surface of a 70-foot high headland which had once fronted the sea but which now lies half a mile back from the present beach. The site consists of shallow midden deposits, covered by a low, sparse growth of vegetation, extending for an area of well over 20 acres, one of the largest Dorset sites known. The site was designated T 1, from Tunermiut, the Eskimo name for Native Point. A second, later Dorset site was found near the Sadlermiut site and called T 2. A third Dorset site, T 3, slightly later than T 1, was found on the old beach line immediately below it, at an elevation of 40 feet above sea level. Samples of charred bone excavated at the T 1 site in 1954 were submitted to the University of Pennsylvania Carbon-14 Laboratory and found to be 2060 ± 230 years old. The thousands of stone, ivory, and bone artifacts found at T 1 and T 3, though conforming in general to the basic Dorset culture pattern, were in many respects specifically different from those found at other Dorset sites in Canada and Greenland. Flint implements, which were far more abundant than any other artifacts, were small and delicately chipped, like Dorset implements generally, but most of them differed in form from previously known Dorset types, and some of them were unlike anything known from America. The majority of the blades would be described as microlithic, and some of them in shape and technique were similar to microlithic types from pre-Eskimo sites in Alaska and Mesolithic sites in the Old World. The cultural material from T 1 and T 3 seems to represent an older, simpler stage leading up to the classic Dorset culture; it should probably be referred to as formative or proto-Dorset. All faunal remains from the excavations were preserved. The thousands of bird bones and occasional fish bones and mollusks were brought back to the Smithsonian for identification. The mammal bones were counted and as many as possible identified in the field. As a result of the bone count some striking differences were observed in the food economy of the Sadlermiut and Dorset Eskimos.

Five days in July were devoted to excavations at an abandoned village site on Walrus Island. The houses, which had been made of massive blocks of granite, proved to be Dorset rather than Sadlermiut as expected, and provided the first adequate information on the house types of the Dorset Eskimos. The artifacts from the houses were typical or classic Dorset, different from and later than those from the proto-Dorset site T 1 at Native Point. Plants, fossils, and insects, including ectoparasites on birds and lemmings, were also collected during the summer.

Two preliminary reports on the Southampton and Walrus Island work were prepared by Dr. Collins, one for the Annual Report of the

National Museum of Canada and the other for Anthropological Papers of the University of Alaska. "Archaeological Research in the American Arctic," a general article describing the current status of Arctic archeology, was published in *Arctic Research, Special Publication No. 2* of the Arctic Institute of North America. Dr. Collins continued to serve as a member of the Board of Governors of the Arctic Institute of North America and of its committee on research. As chairman of the Directing Committee of Arctic Bibliography, he continued to supervise the preparation of this work, a comprehensive annotated bibliography which lists and summarizes the contents of publications in all fields of science relating to the Arctic and sub-Arctic regions of the world. Volume 6 of the Bibliography, 1,208 pages, was issued by the Government Printing Office in April 1956, and material for volume 7, of approximately the same size, was turned over to the printer in June. Funds for the preparation of an eighth volume were obtained from the Departments of the Army, Navy, and Air Force, and the Defense Research Board of Canada. As a member of the Permanent Council and the Organizing Committee of the International Congress of Anthropological and Ethnological Sciences, Dr. Collins participated in the work of planning for the fifth session of the Congress to be held in Philadelphia, September 1-9, 1956. At the close of the fiscal year Dr. Collins was in Europe, making a survey of Mesolithic materials in museums for their possible bearing on the Eskimo problem.

At the beginning of the fiscal year Dr. Philip Drucker was in Mexico finishing up his fieldwork at La Venta, studying the material collected there and comparing it with the collections in the Museo Nacional at Mexico City. It was through Dr. Drucker's intercession that the U. S. National Museum received a collection of 187 polished jadeite and other stone objects from La Venta as a loan from the Museo Nacional of Mexico. Upon his return to Washington in September he completed the writing of his share of the final report on the La Venta excavations, and also completed and submitted for publication his manuscript on the Native Brotherhood Societies of Alaska and British Columbia. On December 9, 1955, Dr. Drucker resigned from the Bureau.

RIVER BASIN SURVEYS

(Prepared by FRANK H. H. ROBERTS, JR., Director, from data submitted by staff members)

Throughout the year River Basin Surveys continued its program for salvage archeology in areas to be flooded or otherwise destroyed by the construction of large dams. As in previous years, the work was carried on in cooperation with the National Park Service and the Bureau of Reclamation of the Department of the Interior, the Corps of Engineers of the Department of the Army, and a number of

State and local institutions. An increase in funds for the fiscal year made possible more extensive investigations than in the preceding year. During 1955-56 the program of the River Basin Surveys was financed by a transfer of \$92,360 from the National Park Service and a grant of \$12,000 from the Idaho Power Co. The funds from the National Park Service were for use in the Missouri Basin. A carryover of \$3,663 from the previous year made the total available for operations in the Missouri Basin \$96,023. The grant from the Idaho Power Co. was to provide for the excavation of sites along the Snake River in Oregon-Idaho which will be flooded by the construction of that company's Brownlee and Hells Canyon dams. The latter funds were the first for work outside the Missouri Basin made available to the River Basin Surveys in several years.

Investigations in the field during the year consisted of surveys and excavations. Most of the efforts were concentrated in the digging of sites. Because of a slight delay in receiving the new Federal funds, it was the middle of July before parties were sent out from the field headquarters at Lincoln, Nebr. On July 15 a survey party began investigations in the Tiber Reservoir. On July 18 a second party started digging at a fortified village site near the mouth of the Cheyenne River in the Oahe Reservoir area, and on July 20 a third party started operations in the vicinity of the Oahe Dam near Pierre, S. Dak. In May a historic-sites party began excavations at the location of an early trading post in the area of the outlet channel below the Oahe Dam. Early in June a second party returned to the Cheyenne site and resumed excavations at that locality. Later a third party proceeded to a village site near Whitlocks Crossing in the Oahe Reservoir basin and started investigations where no previous work had been done. On June 2 a survey party began operations in the Big Bend Reservoir area near Fort Thompson, S. Dak., and on June 12 an excavating party began digging a site in the Lovewell Reservoir area in northern Kansas. Late in June a party proceeded to Robinette, Oreg., where it established camp and initiated excavations in one of the Snake River sites. All these parties were continuing their investigations at the close of the fiscal year. During the year no paleontological studies were made in any of the areas by the River Basin Surveys. However, some fossil collecting was done by State institutions.

As of June 30, 1956, reservoir areas where archeological surveys and excavations had been made since the Salvage Program got under way in 1946 totaled 244 in 27 States; also four canal areas and one lock project had been investigated. The survey parties have located and reported 4,365 archeological sites, and of that number 862 have been recommended for limited testing or excavation. The term "excavation" in this connection implies digging approximately 10 percent of

a site. Preliminary appraisal reports have been issued for all the reservoirs surveyed, and in cases where additional reconnaissance has resulted in the finding of other sites supplemental reports have been prepared. During the last fiscal year four such reports were written and were distributed in a single mimeographed pamphlet. Throughout the years since the initiation of the program 181 reports have been distributed. The discrepancy between that figure and the total number of reservoirs visited is due to the fact that in several instances the information obtained from a whole series of proposed reservoir projects occurring in a basin or subbasin has been included in a single report.

By the end of the fiscal year 329 sites in 46 reservoir basins scattered over 17 different States had either been tested or partially dug. Only a single site was excavated in some of the reservoir areas, while in others a whole series was studied. Thus far at least one example of each type of site recorded in the preliminary surveys has been examined. The results of certain phases of the excavations have appeared in various scientific journals and in the bulletins of the Bureau of American Ethnology and the Miscellaneous Collections of the Smithsonian Institution. During the year River Basin Surveys Paper No. 8, which is to be Bulletin 166 of the Bureau of American Ethnology, was sent to the printer, and at the close of the year galley proofs of the publication were being read by the author. Two detailed technical reports on the results of earlier work were completed during the year and are ready for publication.

The reservoir projects that have been surveyed for archeological remains as of June 30, 1956, were distributed as follows: Alabama, 1; California, 20; Colorado, 24; Georgia, 5; Idaho, 11; Illinois, 2; Kansas, 10; Kentucky, 2; Louisiana, 2; Minnesota, 1; Mississippi, 1; Montana, 15; Nebraska, 28; New Mexico, 1; North Dakota, 13; Ohio, 2; Oklahoma, 7; Oregon, 27; Pennsylvania, 2; South Dakota, 10; Tennessee, 4; Texas, 19; Virginia, 2; Washington, 11; West Virginia, 2; and Wyoming, 22.

Excavations have been made or were under way in reservoir basins in: California, 5; Colorado, 1; Georgia, 4; Kansas, 4; Montana, 1; Nebraska, 1; New Mexico, 1; North Dakota, 4; Oklahoma, 2; Oregon, 4; South Carolina, 1; South Dakota, 4; Texas, 7; Virginia, 1; Washington, 4; West Virginia, 1; and Wyoming, 2. The foregoing figures include only the work of the River Basin Surveys or that in which there was direct cooperation with local institutions. Projects that were carried on by local institutions under agreements with the National Park Service are not included because complete information about them is not available.

During the year the River Basin Surveys continued to receive helpful cooperation from the National Park Service, the Bureau of Reclamation, the Corps of Engineers, the Geological Survey, and various State and local institutions. Transportation and guides were furnished in a number of instances, and mechanical equipment made available by the construction agency speeded the work at a number of locations. Temporary headquarters as well as living accommodations were made available at several projects. Detailed maps of the reservoirs under investigation were supplied by the agency concerned and helpful information was provided whenever it was needed. The National Park Service continued to function as the liaison between the various agencies both in Washington and in the field and through its regional offices obtained information about the locations for dams and reservoirs as well as data concerning construction priorities. The National Park Service was also chiefly responsible for the preparation of estimates and justifications and in procuring funds for carrying on the program. Had it not been for the enthusiastic assistance of the personnel in all the cooperating agencies, it would not have been possible for the River Basin Surveys to have accomplished so much for the year.

General direction and supervision of the program were continued by the main office in Washington. The field headquarters and laboratory at Lincoln, Nebr., was in direct charge of the work in the Missouri Basin. All the materials collected in the Missouri Basin were processed at the Lincoln laboratory and subsequently two large lots of specimens were transferred to the U. S. National Museum. Through the cooperation of the Washington State Museum at Seattle, the Snake River party was provided with a base of operations. The general direction of the activities in that area, however, was from the Washington office.

Washington office.—The main headquarters of the River Basin Surveys at the Bureau of American Ethnology continued throughout the year under the direction of Dr. Frank H. H. Roberts, Jr. Carl F. Miller, archeologist, was based on that office and assisted the director in general administrative duties from time to time. William M. Bass was added to the staff on June 18 as a temporary physical anthropologist.

Mr. Miller reported to the Lincoln office shortly after the beginning of the fiscal year and worked in the Missouri Basin until late in September, when he returned to the Washington office. His activities during the summer are covered in the Missouri Basin portion of this report. After his return to Washington he prepared a series of brief reports on the results of his fieldwork and then turned his attention to his unfinished report on his previous investigations at the John H.

Kerr (Buggs Island) Reservoir in Virginia. In April Mr. Miller was transferred to the regular staff of the Bureau of American Ethnology for the purpose of carrying on investigations in a cave in Jackson County, Ala., where the deposits contained a long sequence of Indian cultural history. He returned from Alabama in June and resumed his duties as a member of the River Basin Surveys staff. He proceeded to Lincoln, Nebr., and on June 21 left for South Dakota where he began excavations at a site in the Oahe Reservoir area. During the months in the Washington office Mr. Miller spoke before a number of Boy Scout troops and acted as scientific consultant to a number of high-school students who were participating in a science contest in Alexandria, Va. During the year Mr. Miller's manuscript "Revaluation of the Eastern Siouan Problem, with Particular Emphasis on the Virginia Branches—the Occaneechi, the Saponi, and the Tutelo," which was a byproduct of his study of the data pertaining to the John H. Kerr Reservoir, was sent to the printer and will appear as Anthropological Paper No. 52 in Bulletin 164 of the Bureau of American Ethnology.

After joining the River Basin Surveys Mr. Bass began a study of the human skeletal material that had been collected in the Missouri Basin and transferred to the U. S. National Museum. His work was well under way at the end of the year.

Columbia Basin.—After a lapse of several years the River Basin Surveys resumed investigations in the Columbia Basin late in the fiscal year. On June 11 Dr. Warren W. Caldwell joined the staff as archeologist. He left Seattle, Wash., on June 22 and proceeded with a party to Robinette, Oreg., where camp was established and excavations were started in a cave not far from the town of Robinette. The latter is built on a series of Indian sites, and tests were to be made also at various places in the town. The party was actively engaged in its investigations at the close of the year.

A report, "Excavations in the McNary Reservoir Basin near Umatilla, Oregon," by Dr. Douglas Osborne, was sent to the printer toward the end of the fiscal year. It will appear as River Basin Surveys Paper No. 8, Bulletin 166 of the Bureau of American Ethnology. The report covers investigations made during a previous year when the River Basin Surveys was operating a full-scale program along the Columbia River.

Missouri Basin.—The Missouri Basin project continued to operate throughout fiscal 1956 from the field headquarters and laboratory at 1517 "O" Street, Lincoln, Nebr. Except for periods of one week in August and two weeks in September, when he was detailed to the Department of Justice to assist in an Indian Lands Claim case, G. Hubert Smith served as archeologist-in-charge from July 1 to Janu-

ary 10. On the latter date Dr. Robert L. Stephenson, chief, returned from academic leave and resumed direction of the project. Activities during the year included all four phases of the Salvage Program: (1) survey; (2) excavation; (3) analysis; and (4) reporting. Phases 2 and 3 received the greatest attention however.

At the beginning of the fiscal year the Missouri Basin project had a permanent staff of eight, six assigned to the Lincoln office and two to the Washington office. Since the chief was in leave status there actually were only seven on active duty. Dr. Waldo R. Wedel, archeologist, and George Metcalf, field assistant, were detailed to the Missouri Basin project from the U. S. National Museum during July and August. In July, August, September, and October there were 20 temporary student and local nonstudent employees working in the field. Their services were gradually terminated as excavations were brought to a close, and by November 5 only the permanent staff remained. During the winter and early spring months a clerk-stenographer, a photographer, and a part-time records custodian were employed. These permanent additions to the staff continued on duty throughout the remainder of the year. In addition, a temporary part-time draftsman and a temporary part-time photographer assisted in the laboratory on various occasions. Wedel and Metcalf were again detailed to the Missouri Basin project on June 5 and were working for it at the close of the fiscal year. One temporary field assistant entered on duty May 28 and another on June 11. Both were with field parties at the end of the year. A temporary physical anthropologist was appointed on June 18 and was assigned to the Washington office to prepare reports on the skeletal materials from various Missouri Basin sites. The archeologist assigned to the Washington office returned to the Missouri Basin on June 20 and was on duty there at the end of the fiscal year. Also, 29 temporary student and local nonstudent laborers were employed in the field. Thus at the close of the year there were 11 permanent employees, 2 employees detailed to the Surveys, 2 temporary field assistants, 1 temporary physical anthropologist, and 29 temporary laborers on the staff of the Missouri Basin project.

During the year eight River Basin Surveys field parties operated in the Missouri Basin, three in the period July–October and five in the period May–June. One party in the July–October period and one in the May–June period were occupied in survey and site-testing activities. One party in the May–June period was engaged in the excavation of a historic site. The other five were excavating in prehistoric and protohistoric Indian village sites. Other fieldwork in the Missouri Basin during the year included six field parties from State institutions working under agreements with the National Park Service

and in cooperation with the Smithsonian Institution. Three of these parties were in the field in the July–October period and three in the May–June period.

In the Tiber Reservoir area a small field party directed by Carl F. Miller conducted excavations along the Marias River in north-central Montana from July 19 to August 16. Various sites located by previous Smithsonian Institution parties in the area were revisited and excavations were conducted at site 24TL26. This site proved to be of Woodland affiliation with some possible earlier and later sporadic occupation. Other sites visited by previous parties and recommended for further study have been destroyed by periodic flooding in the area, and on the completion of the 1955 season no further work was recommended for the reservoir.

In the Pactola Reservoir basin, the Carl F. Miller party conducted investigations on Rapid Creek in Pennington County, S. Dak., August 19–24. A brief survey had been made there in 1948 by a Smithsonian Institution field party, but heavy vegetation prevented adequate investigation at that time. Miller's party failed to find any archeological materials and no further work was recommended for the area.

In the Merritt Reservoir basin, the Carl F. Miller party conducted investigations on the Snake River and Boardman's Creek in Cherry County, Nebr., from August 26 to September 2. Sites recorded by a previous Smithsonian Institution party were revisited, sampled, and analyzed. Two of these had largely been covered by windblown sand, one was test excavated, and two yielded Woodland and later materials. Several blowouts were examined where chipped-stone artifacts were recovered. No further work was recommended for this area until such time as construction activities might bring to light new material.

In the Glendo Reservoir area, on the North Platte River in Platte County, Wyo., the Carl F. Miller party continued its field season from September 5 to 13. Investigations there consisted of a reexamination of sites located by an earlier Smithsonian Institution field party and recording of two new sites. One site, 48PL15, remains as the principal locality for further examination in the Glendo Reservoir area, and work will be started there early in the new fiscal year.

In the Oahe Reservoir area, the Carl F. Miller party concluded its field season at the Buffalo Pasture site (38ST6) in Stanley County, S. Dak., a short distance above the dam construction area. With the aid of a bulldozer a trench 11 feet wide, 367 feet long, and about $3\frac{1}{2}$ feet deep was cut across a portion of the site in order to expose the stratigraphy from the present surface to sterile deposits below any cultural remains. There had been extensive digging at the Buffalo Pasture site during a previous season when the remains of several

earth lodges were uncovered and the encircling moat and remnants of the palisade were studied, but it was not until the big trench was cut that the site was determined to represent a single occupation. The trench bisected the depressions of four circular lodges and exposed some 20 refuse-filled cache pits which were cleaned out by hand. An excellent series of specimens, including a large pottery vessel, was recovered while the operations were under way.

The second field party in the Oahe Reservoir area in the 1955 field season was a Smithsonian Institution group directed by Richard P. Wheeler. This party conducted excavations from July 20 to November 5 at the Leavitt site (39ST215) and at the Breeden site (39ST16), formerly known as the Mathison site. The Leavitt site proved in part to represent an early historic Indian occupation related directly to the occupation at the Philip Ranch site, excavated in 1951 and reported in Bulletin 158 of the Bureau of American Ethnology, and in part to an older late prehistoric period. The site produced materials that assist greatly in the interpretation of both phases in the Oahe area. Especially important was the recovery of 15 human burials. One of them was particularly interesting because the skeleton was that of a large male with a lead musket ball embedded in the dorsal surface of the right pelvic bone. The individual had been shot in the back, possibly while running away from an assailant. There was nothing to indicate immediate death, but the man had not lived long because the bone surrounding the ball had not started to heal. Iron and brass bracelets, as well as glass beads, were found in several of the graves. At the Breeden site there was evidence for at least three occupations. The earliest was older than the first one at the Leavitt site and produced four deeply buried rectangular house remains indicative of the Monroe Focus which is thought to date at approximately A. D. 1200-1300. The later occupations have not been sufficiently identified to correlate definitely with other known cultures but they did have circular house structures. One has been attributed tentatively to the La Roche Focus, which is estimated by some to be A. D. 1600-1700, and the other to the historic Teton Dakota of about 1825 to 1875.

The third Smithsonian Institution party in the Oahe area in the 1955 season was directed by Dr. Waldo R. Wedel, assisted by George Metcalf. Working from July 18 to August 31, that party continued investigations at the Cheyenne River site (39ST1) which were begun by Dr. Wedel in 1951 for the River Basin Surveys. The site, a multi-component one, is located near the juncture of the Cheyenne River with the Missouri. Excavation of a large rectangular pit house, begun in 1951 and identified with the earliest of three occupations, was completed in 1955, and a 70-foot section of the stockade line forming part of the defensive works for the last (third) occupation was un-

covered. Much of the fill removed from the rectangular house pit consisted of sherds, bone, and other refuse material attributable to an intermediate late prehistoric occupation for which no houses have yet been opened on the site. The 1955 work apparently confirms earlier inferences that the site represents three separate occupations, the earliest probably postdating circa A. D. 1300, the latest antedating 1800 and in all likelihood attributable to the Arikara. At the close of the season Dr. Wedel recommended further investigations during the 1956 season in order to ascertain the nature of the dwellings left by the second occupation which it has been suggested may belong to the Bennett Focus. The site also promises important data bearing on the interpretation of village plans, the cultural sequences, and the way of life of the prehistoric Indians of that area.

The fourth party in the Oahe area in the 1955 season was sponsored by the University of South Dakota and the South Dakota Archeological Commission working under a cooperative agreement with the National Park Service. Dr. Wesley R. Hurt, of the University of South Dakota, was the director, and the party continued excavation of the Swan Creek site (39WW7) which was begun the previous year, ending a 7-week season on August 1. Human burials, a moat, a palisade, and houses were excavated, greatly increasing the information on these features for the region. This party also conducted limited test excavations at sites 39WW300, 39WW301, 39WW302, and 39WW303.

In the North Dakota portion of the Oahe Reservoir area the State Historical Society of North Dakota, working under a cooperative agreement with the National Park Service, comprised the fifth field party in that reservoir. The party, directed by Alan R. Woolworth, conducted excavations at the Paul Brave (or Fort Yates) site (32S14) from early July until late August. Three earth lodges of rectangular pattern were excavated. Limited testing was also accomplished in sites 32SI2 and 32SI3. Surface collections were made at a series of other sites in the vicinity, and aerial survey provided photographic records of 10 other sites in the North Dakota portion of the reservoir.

The 1956 field season in the Oahe Reservoir area began early, and by the end of the fiscal year six parties were in the field. G. Hubert Smith led a Smithsonian Institution party to the vicinity of the dam-construction area on May 21 and was still in the field at the end of the fiscal year. Smith's party spent some time examining old historic land records in the General Land Office at the State Capitol in Pierre, as well as records in the South Dakota Historical Society, in an effort to determine the location of various frontier trading posts. They then covered the area carefully on foot and finally found what appear to be the remains of Fort Pierre II which was in use around 1859-63. It



1. River Basin Surveys: Floor pattern of rectangular earth lodge at the Cheyenne Village site. Rows of holes indicate position of walls. Larger holes were cache pits. Entrance platform at far end. Workman is kneeling by fire pit



2. River Basin Surveys: Long curved line of post holes shows location of palisade at the Cheyenne Village. Men working on small cache pits and other post holes inside the stockade. Field camp in background.



2. River Basin Surveys: Uncovering remains of a bison kill at a camp site in the Tibor Reservoir area. Occupation level was 8 feet below the present surface.



1. River Basin Surveys: Indian burial at the Leavitt site near the Oahe Dam. Arrow indicates north and scale stick is 1 foot long. Pottery vessel was a mortuary offering.

also seems probable now that Fort Pierre II and Fort Galpin (1857-59) are identical in location. Excavations in this locality in June revealed the outline of the stockade, the location of several structures, and produced interesting artifactual materials. The fort was much larger than most trading posts as the enclosure was approximately 200 feet square. It was destroyed by fire. Other historic sites scheduled for investigation by this party include Forts La Framboise and Primeau (both dating in the 1860's) and, if time permits, the sites of Fort Sully and Fort Bennett.

On June 5 Dr. Waldo R. Wedel returned to the Missouri River Basin and took a Smithsonian Institution field party to the Cheyenne River site (39ST1) where the final season of excavation was started. By the end of the fiscal year the party had opened several test areas, cache pits, and house features, recovering a good sample of artifacts. Upon completion of work at this site the Wedel party plans to finish excavations which were begun by another River Basin Surveys party in 1952 at the Black Widow site (39ST3).

A Smithsonian Institution party directed by Carl F. Miller began digging at the Hosterman site (39PO7) near Whitlock's Crossing, S. Dak., the last week in June. Having only started by the end of the fiscal year this party had nothing to report.

A University of South Dakota-South Dakota Archeological Commission party, working under a cooperative agreement with the National Park Service and directed by Roscoe Wilmeth of the University of South Dakota, began excavations in mid-June at the Swan Creek site (39WW7). This party also planned to make test excavations at two nearby sites (39WW302 and 39WW303) after completing the work at the Swan Creek site which was begun two seasons ago. They were in the field at the end of the fiscal year.

A University of Wisconsin field party, working under a cooperative agreement with the National Park Service and directed by Dr. David A. Baerreis of that University, began work early in June at the Eklo site (39WW3) near Mobridge, S. Dak. The party expected to conduct test excavations at two other nearby sites (39CA6 and 39CA9) after finishing the season's work at the Eklo site. They were in the field at the end of the fiscal year.

In the North Dakota section of the Oahe Reservoir a State Historical Society of North Dakota field party directed by Alan R. Woolworth, working under a cooperative agreement with the National Park Service, began investigations in mid-June. They excavated at the Demery site (39CO1) in Carson County, S. Dak., and at the Fireheart site (32SI2) in Sioux County, N. Dak. They also were to test an additional site (32SI208) in the vicinity. All three sites are near the North Dakota-South Dakota border. The party was in the field at the end of the fiscal year.

With the added results of the current year's work, it is now possible to identify at least nine archeological complexes in the Oahe portion of the Missouri Basin, covering the years about A. D. 850 to 1859. Some indications have been found of occupations belonging to an earlier period, but they are not sufficiently known as yet to be included in the definitely identified list.

In the Fort Randall Reservoir two field parties operated in the 1955 field season. The Nebraska State Historical Society, under a cooperative agreement with the National Park Service, had a party directed by Marvin F. Kivett excavating at the Crow Creek site (39BF11). Work was started on this site in the 1954 season and the second season's digging there was completed late in August of 1955. This complex site contains the remains of two and possibly three occupations ranging in time over 300 or more years. The season's work provided new data on village plans, house types, fortifications, and relationships of this area to other areas in South Dakota and Nebraska.

The second party in this area was that of the University of Kansas led by Dr. Carlyle S. Smith of that institution and working under a cooperative agreement with the National Park Service. They excavated site 39BF204 over a 7-week period ending the last of July. They also conducted some test excavations in site 39BF201, which appeared to be culturally identical to the former site. Both relate directly to the Spain site (39LM301) and the Talking Crow site (39BF3), which were excavated in previous years by parties under Dr. Smith.

In the Big Bend Reservoir area a Smithsonian Institution party directed by Harold A. Huscher began an intensive survey and site-testing operation in this newly activated reservoir on the Missouri River in South Dakota on June 2. The party planned to search the entire reservoir area for archeological potentialities. It was scheduled to visit all known sites, locate all possible new sites, and make exploratory tests in all of them in order to determine what additional excavation must be done before inundation. By the end of the fiscal year it had visited and tested 20 sites and had located several others from previous records.

In the Lovewell Reservoir area a Smithsonian Institution party directed by Robert W. Neuman began the excavation, on June 12, of three sites on White Rock Creek in Jewell County, Kans. They started at site 14JW1 and worked there until the end of the fiscal year. The other two sites are 14JW2 and 14JW201. These sites should help materially in establishing the significance and cultural

content of the White Rock Focus and its relation to the western extension of the Oneota Aspect.

A total of 15 parties were in the field during fiscal 1956, 7 in the 1955 season, and 8 in the 1956 season, investigating archeological remains in 8 reservoirs. They conducted excavations at 24 sites, tested over 40 sites, and examined the surfaces of nearly 100 sites. Each field party consisted of a crew chief and from 6 to 10 crewmen. Bulldozers and other heavy equipment, supplied through the courtesy of the Lytle-Green Construction Company and the Corps of Engineers, were used at some sites in order to expedite investigations. At all reservoir projects the complete cooperation of the Corps of Engineers and the Bureau of Reclamation personnel was always willingly given.

On May 14 three members of this staff joined Dr. Dwight R. Crandell of the U. S. Geological Survey, Denver office, on an archeological-geological field trip to the areas of the Oahe, Big Bend, and Fort Randall Reservoirs in South Dakota. The party was in the field for seven days, examining Pleistocene and early Recent geological deposits and fossil soils. The principal purpose of the trip was to instruct members of the River Basin Surveys staff how to recognize possible localities where archeological deposits of Early Man material or other pre-pottery cultural remains might be found. The results of the trip, while negative from the standpoint of actually finding such sites, provided this office with a great deal of information as to where and how to search for such material in the future and what might be expected in specific localities. The three members of this staff who accompanied Dr. Crandell were Richard P. Wheeler, G. Hubert Smith, and Lee G. Madison. Dr. Crandell's participation in the project was arranged through the cooperation of Dr. Wilmot H. Bradley, Chief, Geologic Division of the Geological Survey.

While fieldwork during the fiscal year was devoted to phases 1 and 2 (survey and excavation) of the salvage program, laboratory and office activities were devoted to phases 3 and 4 (analysis and reporting). During the time the archeologists were not in the field they were engaged in analyses of their materials and in laboratory and library research. They also prepared manuscripts of technical scientific reports and wrote articles and papers of a more popular nature. The laboratory and office staff devoted its time to processing specimen materials for study, photographing specimens and preparing specimen records, and typing and filing records and manuscript materials. The accomplishments of the laboratory and office staff are listed in the following tables.

TABLE 1.—*Artifact materials processed*

Reservoir	Number of sites	Catalog numbers assigned	Number of specimens processed
Glendo-----	16	431	585
Merritt-----	1	7	220
Oahe-----	14	5, 183	36, 376
Tiber-----	3	172	374
Non-Reservoir-----	2	58	70
Unassigned-----	4	179	527
Total-----	40	6, 030	38, 152

As of June 30, 1956, the Missouri Basin project had cataloged 570,238 specimens from 1,517 numbered sites and 47 collections not assigned site numbers.

Two shipments of archeological materials were sent to the United States National Museum for permanent transfer. One was by Missouri Basin project vehicle and consisted largely of fragile items such as human skeletal remains, pottery vessels and vessel sections, bone, shell, and wooden artifacts. The second was by truck freight and consisted of stone specimens and other more durable materials.

TABLE 2.—*Record materials processed*

Reflex copies of records-----	1, 286
Photographic negatives made-----	615
Photographic prints made-----	2, 784
Photographic prints mounted and filed-----	1, 004
Plate layouts made for manuscripts-----	42
Transparencies mounted in glass-----	81
Drawings, tracings, and maps-----	14
Pottery vessels restored-----	3
Pottery vessel sections restored-----	32

On May 3, 4, and 5 the annual meetings of the Society for American Archaeology were held in Lincoln, Nebr. As a programmed part of the meetings, Thursday evening, May 3, was devoted to an "open house" at the Missouri Basin project laboratory at 1517 "O" Street. The office and laboratory were prepared with suitable displays of photographic and specimen materials in order to best exhibit the work of the Missouri Basin project. The "open house" was scheduled for 8:00 to 10:00 p. m. but lasted until well past midnight. Approximately 120 people visited the office and laboratory at that time.

Most of the activities of the Lincoln office during the first three weeks in March were devoted to a general remodeling of the office space at 1517 "O" Street. The entire first floor was cleaned and painted. The floors were sanded and coated with floor preservative.

The west half of the first floor was partitioned into seven office cubicles. A map room was made and the filing and secretarial facilities were improved. All the work was done by members of the staff.

Dr. Robert L. Stephenson, chief of the Missouri Basin project, returned to Lincoln on January 10 after 16 months academic leave and resumed his duties at the headquarters and laboratory. During the remainder of the fiscal year most of his activities were directed toward the preparation of plans for the summer's field program. In addition, he started work on a summary report of the Missouri Basin Salvage Program for the calendar years 1952-1955. He presented a paper, "Topography of a Late Archeological Site," at the 66th Annual Meeting of the Nebraska Academy of Sciences held in Lincoln on April 20-21. An abstract of the paper was published in the Proceedings of the Nebraska Academy of Sciences. He also took an active part in the annual meeting of the Society for American Archaeology held in Lincoln May 3-5 and presented a paper entitled "Pottery from the Accokeek Site, Maryland." At the close of the fiscal year he was preparing to take a field party to the Sully site (39SL4) in the Oahe area north of Pierre, S. Dak.

Harold A. Huscher, field assistant, who worked several previous seasons for the River Basin Surveys, rejoined the staff on May 28, and on June 2 left Lincoln in charge of a survey party which proceeded to Pierre, S. Dak., and began a reconnaissance of the proposed Big Bend Reservoir area on the Missouri River. The work of the Huscher party was continuing on June 30.

Robert W. Neuman, temporary field assistant, joined the staff on June 11. He left Lincoln on June 12 as the leader of a party which proceeded to the Lovewell Reservoir on White Rock Creek, Jewell County, Kans. By the end of the fiscal year he had excavated for two weeks in site 14JW1 and one week in site 14JW201. The work of Mr. Neuman and his party was handicapped by severe rains but was continuing at the close of the year.

G. Hubert Smith, archeologist, as previously stated was in charge of the Lincoln office during most of the period from July 1 to January 10. His work for the Department of Justice pertained to preparing an ethnohistorical report on the Omaha tribe and appearing as a witness at a hearing held in Washington late in September when his report was introduced as evidence. During the fall and winter months Mr. Smith completed the manuscript of a detailed archeological report on excavations at the site of Fort Berthold II (32ML2) in the Garrison Reservoir area in North Dakota. In addition Mr. Smith worked on a manuscript pertaining to excavations at Fort Berthold I and the adjacent Like-a-Fishhook Village. The latter paper is being prepared in collaboration with Alan R. Woolworth of the North Dakota Historical Society and James H. Howard who was formerly associated

with that organization and is now at the Kansas City Museum. Mr. Smith participated in the annual Plains Archeological Conference, the meetings of the Nebraska Academy of Sciences and of the Society for American Archaeology which were held at Lincoln. At the Anthropological Section of the Academy of Sciences, he presented a paper on the ethnographic contributions of Paul Wilhelm, Duke of Wuerttemberg, who first visited the Upper Missouri region in 1820. Early in May Mr. Smith went to Pierre, S. Dak., and spent a week with the geological party that was studying deposits in the Oahe Reservoir area. Following that activity he remained at Pierre and began his regular summer's program, as mentioned in previous pages. Mr. Smith's party was continuing its excavations just below the Oahe Dam at the end of the year.

Upon completing the 1955 season's work Dr. Waldo R. Wedel returned to Lincoln, and before his departure for Washington from the Missouri Basin project headquarters, proceeded to Turin, Iowa, to examine a reported find of human skeletons. He was accompanied by Lawrence L. Tomsyck of the Lincoln office, and when they arrived at the location of the burials they joined representatives from a number of institutions in studying the finds. Absence of diagnostic artifacts with the skeletons precluded any valid estimate of age or cultural affiliations, but nothing was noted that would confirm assertions which had been freely made that the bones were those of Paleo-Indians and had a Pleistocene dating. Upon his return to Washington Dr. Wedel resumed his regular duties at the U. S. National Museum. He was again detailed to the River Basin Surveys for the 1956 season and reported at the Lincoln headquarters on June 4. His subsequent activities were described in the preceding discussion of field parties in the Oahe area.

Richard P. Wheeler, archeologist, was in charge of a field party working in the Oahe Reservoir area from July 25 through October 29. During the remainder of the fiscal year he devoted his time to analyzing the materials obtained in the field and in working on a number of technical reports and short articles. One article, "Recent Archeological Salvage Operations in the Missouri Basin," was published in the Missouri River Basin Progress Report, October-December, 1955, and another, "'Quill Flatteners' or Pottery Modeling Tools," was published in the Plains Anthropologist, April 1956. Wheeler presented a paper on his work in the Oahe Dam area at the Plains Conference in November and participated in a number of discussions during the conference. He was elected chairman of the 14th Plains Conference which will be held in Lincoln in November 1956. At the end of the fiscal year Mr. Wheeler was at the Lincoln headquarters working on reports.

Cooperating institutions.—Several State and local institutions continued to cooperate in the Inter-Agency Salvage Program throughout the year, although the shortage of funds for working agreements in projects outside the Missouri Basin considerably reduced the activities. Several State groups carried on independently but their investigations were correlated with the general program. The New York State Museum at Albany kept close check on projects in that State. The Department of Anthropology at the University of Michigan studied the possible effect of proposed enlargements of the South Canal on St. Marys River on archeological manifestations in that district. The University of Minnesota made preliminary investigations relative to sites that may be involved in the flood-control program for the Mankato area. The Florida State Museum checked several proposed canal routes in the northern part of Florida. The Ohio State Historical and Archeological Society continued salvage work in several localities, and the Historical Society of Indiana included examination of proposed reservoir areas in its general program for surveys in that State. The University of California Archeological Survey did some further work on projects for which it previously had agreements with the National Park Service, and the Archeological Survey Association of Southern California continued its volunteer efforts in the vicinity of San Diego. In the Columbia Basin the University of Oregon did additional digging at sites on the Oregon side of the Columbia River at the Dalles Reservoir, while the University of Washington continued its investigations on the Washington side.

The only work done under an agreement with the National Park Service, except for that previously described for the Missouri Basin, was that of the University of Missouri in the Table Rock Reservoir on the White River in southern Missouri. A special appropriation for that project for the fiscal year made possible an extensive series of investigations under the direction of Dr. Carl H. Chapman. Sites in the Table Rock area are exceptionally numerous and represent a variety of cultures. Considerable progress was made by Dr. Chapman and his parties during the year.

ARCHIVES

The Bureau Archives continued during the year under the custody of Mrs. Margaret C. Blaker. From June 4 to 6 Mrs. Blaker attended the Special Libraries Association Convention in Pittsburgh, Pa., where copyright problems and the preservation, microfilming, cataloging, and arranging of photographic and manuscript collections were discussed.

MANUSCRIPT COLLECTIONS

The manuscript collections continue to be utilized by students. Visitors consulted about 264 manuscripts, and reproductions of 70

manuscripts were mailed out. In addition, 89 mail inquiries concerning manuscripts were received and more than 200 manuscripts were consulted by the archivist in preparing replies.

While examining these manuscripts, 93 of them were analyzed and more fully described in anticipation of publishing a manuscript catalog. Several descriptive lists of manuscripts relating to specific subjects or tribes were prepared for distribution.

Additions to the collections included a manuscript translation of the Book of Genesis into Choctaw by Rev. Cyrus Byington, dated 1862. This translation was received from Miss Marcia Walton of New York City. Accompanying the gift were a number of photographs and news clippings relating to the Reverend Byington's work; some of these are for permanent deposit, while others have been lent for copying only.

Just at the year's end, Dr. Philip Drucker's field notebooks and unpublished manuscripts for the period 1937-55 were accessioned and sorted. They cover ethnological and archeological work in Alaska, the Northwest coast, California, Meso-America, and Micronesia. They occupy about 20 manuscript boxes.

PHOTOGRAPHIC COLLECTIONS

A sustained interest in pictorial data relating to the American Indian has been shown by authors, publishers, students, and others who have continued to draw heavily on the Bureau's photographic collections. There were 294 inquiries and purchase orders for photographs, and 978 prints were distributed. In response to public inquiry, the archivist prepared numerous lists that described photographs available for specific subjects or tribes.

Public interest has also been demonstrated by the contribution of additional Indian photographs to the Bureau's collections.

Frank B. Shuler of Hamilton, Ohio, lent a group of 29 photographs of Kiowa, Comanche, Caddo, Wichita, and Sioux Indians. These photographs were made about 1900. Copy negatives of 17 of these were made for Bureau files.

Through the courtesy of Mr. and Mrs. Hugh N. Davis, Jr., of Miami, Fla., the Bureau received 295 photographic prints of Seminole, Cheyenne, and Alaskan Indians photographed during the years 1905-52 by Deaconess Harriet M. Bedell, a missionary now residing in Everglades City, Fla. Mr. and Mrs. Davis contributed their services in making enlarged 8-x-10" prints from snapshot negatives lent to them by Deaconess Bedell; the cost of the materials used was borne by the Bureau.

Later in the year a collection of 450 snapshot negatives of Seminole Indians, made principally by Stanley Hanson in the period 1927-31, was lent to the Bureau by Robert Mitchell of Orlando, Fla., through

Gene Stirling of Venice, Fla. Copy negatives of some 280 of these were made. Enlargements of the remainder are being printed, the work being about half completed at year's end.

ILLUSTRATIONS

Illustrative work for the Bureau of American Ethnology and the River Basin Surveys consumed the major portion of the illustrator's time for the year. This included a great variety of work on charts, graphs, maps, diagrams, photograph retouching, and other illustrations for the Bureau and River Basin Surveys publications.

There were also charts, graphs, mechanical renderings, and illustrations on a variety of other subjects prepared for other Smithsonian departments.

EDITORIAL WORK AND PUBLICATIONS

There were issued 1 Annual Report and 1 Bulletin, as follows:

Seventy-second Annual Report of the Bureau of American Ethnology, 1954-1955.
ii + 24 pp. 1956.

Bulletin 163. *The Diné: Origin myths of the Navaho Indians*, by Aileen O'Bryan.
viii + 188 pp., 1 pl., 23 figs. 1956.

The following publications were in press at the close of the fiscal year:

Bulletin 161. *Seminole music*, by Frances Densmore.

Bulletin 162. *Guaymí grammar*, by Ephraim S. Alphonse.

Bulletin 164. *Anthropological Papers Nos. 49-56*.

No. 49. *The Ormond Beach Mound, east central Florida*, by Jesse D. Jennings, Gordon R. Willey, and Marshall T. Newman.

No. 50. *Hair pipes in Plains Indian adornment, a study in Indian and White ingenuity*, by John C. Ewers.

No. 51. *Observations on some nineteenth-century pottery vessels from the Upper Missouri*, by Waldo R. Wedel.

No. 52. *Revaluation of the Eastern Siouan problem, with particular emphasis on the Virginia branches—the Occaneechi, the Saponi, and the Tutelo*, by Carl F. Miller.

No. 53. *Archeological reconnaissance of Tabasco and Campeche*, by Matthew W. Stirling.

No. 54. *Valladolid Maya enumeration*, by John P. Harrington.

No. 55. *Letters to Jack Wilson, the Paiute Prophet*, written between 1908 and 1911, edited by Grace M. Dangberg.

No. 56. *Factionalism at Taos Pueblo, New Mexico*, by William N. Fenton.

Bulletin 165. *Music of Acoma, Isleta, Cochiti, and Zuñi Pueblos*, by Frances Densmore.

Bulletin 166. *River Basin Surveys Papers, No. 8. Excavations in the McNary Reservoir Basin near Umatilla, Oregon*, by Douglas Osborne.

Bulletin 167. *Archeological investigations at the mouth of the Amazon*, by Betty J. Meggers and Clifford Evans.

Miscellaneous publications. List of publications of the Bureau of American Ethnology, with index to authors and titles. Revised to June 30, 1956.

Publications distributed totaled 17,018 as compared with 24,533 for the fiscal year 1955.

COLLECTIONS

Acc. No.

208851. 4 specimens of birch bark bearing pictographs incised and etched by the Passamaquoddy Indians of Maine and the Abnaki of New Brunswick.
209009. 35 vials and 39 envelopes of insects from Southampton and Walrus Islands, 300 plants, mollusks, fossils, lemmings, and 38 mammals, collected by Henry B. Collins.

FROM RIVER BASIN SURVEYS

207595. Archeological material consisting of pottery, stone, bone, glass, and metal objects collected by reconnaissance parties of the Missouri Basin Project in and about 16 reservoir areas in Nebraska, and human skeletal material from 4 sites.
207596. Archeological specimens from North Dakota.
208180. 149 fresh-water mollusks from Nebraska and Wyoming, collected by Carl F. Miller.
209283. Archeological specimens consisting of pottery, stone, bone, glass, and metal objects collected by parties of the Missouri Basin Project, in and about two sites in area of Fort Randall Reservoir, Charles Mix County, S. Dak., and human skeletal material from 39CH7.
209694. Archeological material consisting of rim and body sherds from Clay County, Kans.
209962. Archeological material consisting of pottery, stone, bone, and shell objects collected by reconnaissance parties of the Missouri Basin Project, from two mound sites in South Dakota, 1947-48, human skeletal material.
209963. Shell beads collected by reconnaissance parties of the Missouri Basin Project from site in Stanley County, S. Dak., human skeletal material.
210409. Archeological and human skeletal material from site in Fort Randall Reservoir, S. Dak.

MISCELLANEOUS

Dr. John R. Swanton, Dr. Frances Densmore, Dr. Antonio J. Waring, Jr., and Ralph S. Solecki continued as collaborators of the Bureau of American Ethnology. Dr. John P. Harrington is continuing his researches with the Bureau as research associate. Dr. William C. Sturtevant, ethnologist, joined the staff of the Bureau on March 29, 1956.

Information was furnished during the past year by staff members in reply to numerous inquiries concerning the American Indians—past and present—of both continents. Many new descriptive lists and information leaflets were prepared in answer to requests for information on the Bureau's photographic and manuscript collections and other subjects. There continued to be a constant demand for information, published material, and photographs from teachers, particularly of

primary and secondary grades, from Scout organizations, and from the general public. Material for use in writing term papers was in frequent demand by high-school students who show an increasing interest in this popular subject. On several occasions publishers consulted various staff members regarding ethnological and archeological problems, and the archivist regarding unpublished manuscripts and the photograph collections. Specimens sent to the Bureau were identified and data on them furnished for their owners.

Respectfully submitted.

M. W. STIRLING, *Director.*

Dr. LEONARD CARMICHAEL,
Secretary, Smithsonian Institution.



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Seventy-fourth Annual Report

of the

**BUREAU OF AMERICAN
ETHNOLOGY**



1956-1957



**SMITHSONIAN INSTITUTION
WASHINGTON
D. C.**

Second-Form Annual Report

of the

BUREAU OF AMERICAN
ETHNOLOGY

1850-1851



SMITHSONIAN INSTITUTION

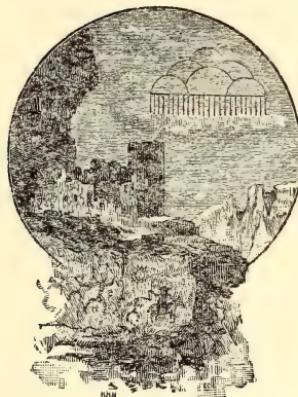
WASHINGTON

D. C.

SEVENTY-FOURTH
ANNUAL REPORT OF THE
BUREAU OF
AMERICAN ETHNOLOGY

TO THE SECRETARY OF THE
SMITHSONIAN INSTITUTION

1956-1957



UNITED STATES
GOVERNMENT PRINTING OFFICE
WASHINGTON : 1958

BUREAU OF AMERICAN ETHNOLOGY

June 30, 1957

Director.—MATTHEW W. STIRLING.

Associate Director.—FRANK H. H. ROBERTS, JR.

Anthropologists.—HENRY B. COLLINS, WILLIAM C. STURTEVANT.

Research Associates.—JOHN R. SWANTON, JOHN P. HARRINGTON,
A. J. WARING, JR., RALPH S. SOLECKI.

Archives Assistant.—MARGARET C. BLAKER.

Scientific Illustrator.—E. G. SCHUMACHER.

RIVER BASIN SURVEYS

Director.—FRANK H. H. ROBERTS, JR.

Chief, Missouri Basin Project.—ROBERT L. STEPHENSON.

Archeologists.—WARREN W. CALDWELL, CHARLES H. McNUTT,
CARL F. MILLER, G. HUBERT SMITH, RICHARD P. WHEELER.

Physical Anthropologist.—WILLIAM M. BASS.

SEVENTY-FOURTH ANNUAL REPORT OF THE BUREAU OF AMERICAN ETHNOLOGY

M. W. STIRLING, *Director*

SIR: I have the honor to submit the following report on the field researches, office work, and other operations of the Bureau of American Ethnology during the fiscal year ended June 30, 1957, conducted in accordance with the act of Congress of April 10, 1928, as amended August 22, 1949, which directs the Bureau "to continue independently or in cooperation anthropological researches among the American Indians and the natives of lands under the jurisdiction or protection of the United States and the excavation and preservation of archeologic remains."

SYSTEMATIC RESEARCHES

Dr. M. W. Stirling, Director of the Bureau, spent the period February 4 to May 10 conducting an archeological reconnaissance in Ecuador under the joint auspices of the National Geographic Society and the Smithsonian Institution. Assisting in the work were Mrs. Stirling and Woodbridge Williams, National Geographic Society photographer. During the course of the expedition the party saw all the major archeological collections in the country. They made test excavations at various places on the coast of Esmeraldas and Manabi and during April 3 to April 17 conducted a stratigraphic excavation at Tarqui, near Manta. The cultural deposits reached a depth of 15 feet. Although detailed study of the abundant material recovered remains to be done, the site evidently belongs to the late Formative Period. Other places of interest visited during the reconnaissance were the Island of Santa Clara, the Inca ruin of Ingapirca, and the famous archeological site of La Tolita on the northern coast. On the east side of the Andes several mound groups were discovered on the Pastaza River in the vicinity of Puyo and Shell Mera. The work was accomplished with the permission and cordial cooperation of the Ecuadorean Casa de la Cultura. The expedition is particularly indebted to Carlos Zevallos Menéndez, head of the Casa de la Cultura in Guayaquil, and to Emilio Estrada of Guayaquil for their whole-hearted assistance.

Dr. Frank H. H. Roberts, Jr., Associate Director of the Bureau, devoted most of his time to duties pertaining to the management of the River Basin Surveys, of which he is Director (see his report,

p. 44). Early in July he made an inspection trip to a field party working in the Lovewell Reservoir area on White Rock Creek in Kansas, and to parties working in the vicinity of Pierre, S. Dak. He attended and participated in the sessions of the Fifth International Congress for Anthropological and Ethnological Sciences held at Philadelphia, Pa., in September. During the fall and winter months he reviewed and revised a number of manuscript reports on the results of investigations in several areas. In November he visited the field office and laboratory of the River Basin Surveys at Lincoln, Nebr., and presided over one of the sessions of the 14th Conference for Plains Archeology. At the end of April Dr. Roberts went to Lincoln to assist in preparing plans for the coming field season and to take part in a meeting of the Missouri Basin Inter-Agency Committee, which convened there on May 1. From Lincoln he went to Madison, Wis., to attend the annual meeting of the Society of American Archeology and to discuss problems concerning the Inter-Agency Salvage Program with archeologists present there. He returned to Lincoln later in May to confer with members of the field staff on the program for summer fieldwork and attended sessions of the annual meeting of the American Association of Museums being held there. Early in June he visited a field party that was excavating sites in the Toronto Reservoir area on the Verdigris River in southeastern Kansas. At the close of the fiscal year Dr. Roberts was in the office in Washington.

At the beginning of the fiscal year Dr. Henry B. Collins, anthropologist, was in Europe studying museum collections of Mesolithic materials for their possible bearing on the Eskimo problem. The study was supported by a grant from the American Philosophical Society. The need for such a study arose from the fact that recent excavations at early Eskimo and pre-Eskimo sites in Alaska, Canada, and Greenland have revealed a number of implement types similar to those of the Mesolithic and early Neolithic cultures of Eurasia, lending weight to previous indications that Eskimo culture was basically of Mesolithic origin. Prominent among the Arctic sites exhibiting Mesolithic affinities is the early Dorset culture site T 1, on Southampton Island, Hudson Bay, where Dr. Collins excavated in 1954 and 1955.

In London Dr. Collins examined the extensive collection of Mesolithic implements from Europe, Africa, India, and Ceylon in storage at the British Museum (Great Russell Street) as well as the African materials in the British Museum (Natural History), South Kensington. At Cambridge he discussed Mesolithic problems with Dr. J. G. D. Clark and examined the collections, mainly from the early Mesolithic site of Star Carr, in the University Museum. The Tardenoisian and Azilian collections in the Musée de l'Homme, Paris, were made available through the courtesy of the Director, Dr. Henri V. Vallois. At the Bernisches Historisches Museum, Bern, Dr. Hans-Georg Bandi

showed Dr. Collins the materials from a stratified cave near Basel, where Tardenoisian was found overlying the older Sauveterrien, and Dr. R. Wyss showed him materials, now in process of publication, from early Mesolithic sites in the vicinity of Schötz, Canton Luzern. Drs. E. Vogt and Joseph Speck made available the extensive Mesolithic and Neolithic study materials in the Schweizer Landesmuseum, Zürich, and Museum für Urgeschichte, Zug. Other Swiss museums in which similar collections were studied were the Musée d'Art et d'Histoire, Fribourg; Museum Schwab in Biel; Heimatmuseum, Rorschach; Musée d'Art et d'Histoire de Genève; Historisches Museum, St. Gallen; Historisches Museum, Baden; Gletschergarten Museum, Luzern; Musée Archéologique et Historique, Lausanne; and Heimatmuseum, Schötz. The extensive Mesolithic collections from Scandinavia in the National Museum, Copenhagen, were examined during the time Dr. Collins was there as a delegate to the 32d Session of the International Congress of Americanists. At the Museum of Far East Antiquities in Stockholm, through the kindness of Drs. Karlgren and Sommerstrom, he was able to study the rich collection of artifacts from Mesolithic and Neolithic sites in Inner Mongolia obtained by the late Dr. Folke Bergman, archeologist of the Sven Hedin Expedition. The firsthand knowledge of the Mesolithic materials from Eurasia gained from the museum survey will make possible a more precise evaluation of the relationship between the Old World Mesolithic and the early Eskimo and pre-Eskimo cultures of the American Arctic. The results will be incorporated in reports describing and interpreting the Arctic materials, including those excavated on Southampton Island in 1954 and 1955.

Preliminary reports on the early Dorset materials from Southampton Island have been published in the Annual Report of the National Museum of Canada and in Anthropological Papers of the University of Alaska. A popular article on the work was published in the National Geographic Magazine for November 1956, and a general article on the same subject appeared in the Smithsonian Annual Report for 1956. An article on Eskimo archeology was prepared for the next edition of the Encyclopaedia Britannica. Dr. Collins continued to serve as chairman of the directing committee of *Arctic Bibliography*, an annotated and indexed bibliography of Arctic publications in all fields of science, which is being prepared for the Department of Defense by the Arctic Institute of North America. Volume 7 of the *Bibliography* was issued by the Government Printing Office in June 1956, and the material for volume 8 will be turned over to the printer in July.

Dr. William C. Sturtevant, ethnologist, divided his time principally between continuing his studies of the Florida Seminole (begun before joining the Bureau) and initiating new studies among the Seneca.

During the year he continued analysis and organization of his Seminole field notes and conducted research on printed, manuscript, and photographic materials relating to the Seminole in library and archival repositories in Washington and in the library of the American Philosophical Society in Philadelphia. He continued the work of revising for publication a manuscript on Seminole medicine and magic, and prepared for fieldwork in Florida during the next fiscal year. He nearly completed during the year a long paper on the supposed ethnological resemblances between the southeastern United States and the West Indies. His short Seminole autobiography, collected in 1950 and 1952, appeared in the journal *Tequesta*, this being the first such document published for any tribe of the southeastern United States. At the end of January and the beginning of February, Dr. Sturtevant spent a week in south Florida, where he delivered a public lecture on "The Indians of South Florida" before the Historical Association of South Florida and read a paper on "Accomplishments and Opportunities in Florida Indian Ethnology" at the annual meetings of the Florida Anthropological Society. This trip enabled Dr. Sturtevant to revisit several Seminole settlements, securing some new ethnological data.

Another project involved library research on the history and use of some root foods of the southeastern United States and the West Indies—chiefly the cycad *Zamia* and manioc. A monograph on the subject is in preparation, and future fieldwork concentrating on the same topic is planned for Cuba and perhaps elsewhere. New evidence has been discovered here relating to supposed prehistoric contacts between the two regions and to continuity in each area between aboriginal and European practices with regard to root foods, and on changes and borrowings during the historic period.

Dr. Sturtevant's Seneca work concentrated on the use and manufacture of wooden masks, and especially on the esthetic attitudes of the modern Seneca toward these masks. Trips were made to examine museum collections and consult specialists in Philadelphia, New York, New Haven, Albany, and Rochester. Dr. Sturtevant spent May and June doing fieldwork on the Cattaraugus Seneca reservation in western New York State, with briefer trips to the nearby Allegany Seneca reservation. No intensive ethnological work has been done on the Cattaraugus reservation for some 40 years, in marked contrast to the situation with other Seneca communities. The fieldwork enabled the documentation of differences between the Cattaraugus Seneca and other Seneca already described in the literature, especially in the ceremonial cycle of the non-Christian groups. Considerable information was collected on present-day usages and beliefs connected with the masks. Texts of myths, religious speeches, prayers, and songs

related to them were recorded in Seneca and transcribed and translated. Case histories of individuals cured by use of the masks were also gathered and analyzed. The esthetic attitudes of the Seneca toward the masks are difficult to distinguish from their feelings about their religious associations and ceremonial and curative powers, but through the use of photographs of museum specimens and the examination with informants of specimens in use in the community and a collection in the Buffalo Museum of Science, some data on this topic were obtained. Another subject on which investigations were begun at both Cattaraugus and Allegany is an interesting pattern of ritual friendship, by which two or more individuals go through a ceremony for curative or other reasons, which puts them in a siblinglike relationship and results in the extension of the appropriate kinship terms and some aspects of kinship behavior to other members of their families. This is a form of fictional kinship which has interesting parallels in many other societies; godparenthood and blood-brotherhood are related phenomena, for example.

Dr. Sturtevant also attended the Fifth International Congress of Anthropological and Ethnological Sciences, in Philadelphia, September 1-9, and the Tenth Conference on Iroquois Research, Red House, N. Y., October 26-28.

On May 8, 1957, Carl Miller was temporarily transferred from the River Basin Surveys to the rolls of the Bureau of American Ethnology for the period ending September 1, in order that he might continue the excavations begun last year at Russell Cave, Alabama, where very early Indian remains were found in stratigraphic sequence. He spent May and June at Russell Cave opening a new trench and making preparations for converting the excavation into a permanent exhibit.

RIVER BASIN SURVEYS

(Prepared by FRANK H. H. ROBERTS, JR., Director, from data submitted by staff members)

The River Basin Surveys, a unit of the Bureau of American Ethnology, continued its program for salvage archeology throughout the fiscal year. The investigations were carried on in cooperation with the National Park Service and the Bureau of Reclamation of the Department of the Interior, the Corps of Engineers of the Department of the Army, and several State and local institutions. Because of an increase in funds more activities were possible than in the preceding year. During fiscal 1956-57 the work of the River Basin Surveys was supported by a transfer of \$108,500 from the National Park Service to the Smithsonian Institution. Of that sum \$90,000 was for use in the Missouri Basin and \$18,500 for work in other drainage areas. This was the first time in several years that Federal money was available for studies by the River Basin Surveys at projects outside the Missouri Basin. A

grant of \$12,000 from the Idaho Power Co., made late in the spring of 1956 for archeological investigations along the Snake River in Idaho-Oregon in the districts to be flooded by the Brownlee, Oxbow, and Hells Canyon dams, was available for the field season beginning July 1, and that, with the new Federal money, gave a total of \$30,500 for several reservoir basins in scattered portions of the country. The Missouri Basin Project had a carryover of \$24,954 on July 1 and that, with the new appropriation, provided a total of \$114,954 for work in that area. The grand total of funds available for the River Basin Surveys for 1956-57 was \$145,454.

Field investigations during the year consisted of both surveys and excavations, although the major efforts were directed to the excavation of sites. On July 1, 1956, six parties were in the field—five engaged in digging, the sixth doing preliminary survey and testing. Three of the excavating parties were working in the Oahe Reservoir area in South Dakota, one was in the Lovewell Reservoir area in Kansas, and one was opening sites along the Snake River near Robinette, Oreg. The survey-testing party was devoting its entire attention to the Big Bend Reservoir area in South Dakota. Shortly after the first of July another party proceeded to a large site in the Oahe Reservoir area, also in South Dakota, and began a program of mapping and testing at the remains of the largest known earth-lodge village on the upper Missouri River. All these parties remained in the field until September. Late in August a party proceeded to the Coralville Reservoir on the Iowa River in Iowa and carried on a series of excavations in five sites, working until mid-October. A survey-testing party worked in the Toronto Reservoir area in Kansas from September 22 to October 28. Late in October excavations were started at a large mound in the Hartwell Reservoir area on the Savannah River in Georgia. They were continued until March, when the study of the mound was completed. During March and April a preliminary survey was made of the Dardanelle Reservoir area on the Arkansas River in Arkansas. During April another party made a preliminary survey of the Warrior Lock and Dam on the Black Warrior River in Alabama. On May 15 an excavating party proceeded to the Toronto Reservoir on the Verdigris River in Kansas, and on June 29 it completed the investigations in that area. Early in June four excavating parties started digging at sites in the Oahe Reservoir area in South Dakota and were continuing their investigations at the end of the fiscal year. At the same time an additional four field parties moved into the Big Bend Reservoir basin in South Dakota and began excavating sites in that area. They were continuing their operations at the end of the year. Late in June a survey-testing party moved to the Big Bend area and was just beginning its work on June 29. During the fiscal year nine parties from cooperating institutions also conducted excavations in

the Missouri Basin. Six of them worked in the Oahe Reservoir area, one in the Glendo Reservoir area in Wyoming, one at the Tuttle Creek Reservoir in Kansas, and one at the Pomme de Terre Reservoir in Missouri. Three of the parties completed their projects during the field season of 1956 and the remaining six were continuing their 1957 programs at the end of the fiscal year.

By June 30, 1956, reservoir areas where archeological surveys had been made or excavations carried on since the start of actual fieldwork by the River Basin Surveys in the summer of 1946 totaled 247 in 28 States. In addition, two lock projects and four canal areas had also been examined. As a result of the surveys 4,622 sites had been located and recorded, and of that number 935 have been recommended for examination or limited testing. In using the term "excavation," the complete uncovering of a site is not indicated. Rather it implies digging only about 10 percent of the site. Though many of the locations are of sufficient significance to warrant complete excavation, the needs of the Salvage Program are such that it is not possible to make so extensive an investigation at any one location. Preliminary appraisal reports have been completed for all the reservoir areas surveyed with the exception of one that was done late in the year, and that report is well under way. During the course of the year two such reports were completed and at the end of the year were being mimeographed for distribution to the agencies cooperating in the Inter-Agency Archeological Salvage Program. Since the start of the program 183 such reports have been distributed. In several cases information obtained from a number of reservoir projects falling within a single basin or subbasin have been combined in a single report, and for that reason there is a considerable difference between the number of reservoirs surveyed and that of the reports issued.

At the end of the fiscal year 350 sites in 47 reservoir basins located in 18 different States had been either partially or extensively dug. In some of the reservoir areas only a single site was excavated, while in others a whole series was studied. At least one example of each type of site recorded by the preliminary surveys had been investigated. In the case of some of the larger and more complex types of village remains, it has been necessary to dig a number of somewhat similar sites in order to obtain full information concerning that phase of aboriginal culture. Reports on the results obtained in certain of the excavations have appeared in the Smithsonian Miscellaneous Collections, in Bulletins of the Bureau of American Ethnology, and in various scientific journals. During the year River Basin Surveys Papers 9-14, which are to be Bulletin 169 of the Bureau of American Ethnology, were sent to the printer. The six papers consist of three pertaining to investigations in the Missouri

Basin, one to a site in the Allatoona Reservoir area in Georgia, and two to the Jim Woodruff Reservoir area, Georgia-Florida. Three detailed technical reports on the results of earlier work were completed during the year and are ready to submit to the editors for publication.

The distribution of the reservoir projects that have been surveyed for archeological remains was as follows on June 30, 1957: Alabama, 2; Arkansas, 1; California, 20; Colorado, 24; Georgia, 5; Idaho, 11; Illinois, 2; Kansas, 10; Kentucky, 2; Louisiana, 2; Minnesota, 1; Mississippi, 1; Montana, 15; Nebraska, 28; New Mexico, 1; North Dakota, 13; Ohio, 2; Oklahoma, 7; Oregon, 27; Pennsylvania, 2; South Dakota, 10; Tennessee, 4; Texas, 19; Virginia, 2; Washington, 11; West Virginia, 2; and Wyoming, 22.

Excavations have been made or were under way in reservoir basins in California, 5; Colorado, 1; Georgia, 5; Kansas, 5; Montana, 1; Nebraska, 1; New Mexico, 1; North Dakota, 4; Oklahoma, 2; Oregon, 4; South Carolina, 1; South Dakota, 4; Texas, 7; Virginia, 1; Washington, 4; West Virginia, 1; and Wyoming, 2. Only the work of the River Basin Surveys or that which was in direct cooperation between the Surveys and local institutions is included in the preceding figures. Investigations carried on under agreements between the National Park Service and State and local institutions have not been included because complete information about them is not available.

As in previous years, helpful cooperation in carrying on the River Basin Surveys program was received from the National Park Service, the Bureau of Reclamation, the Corps of Engineers, and various State and local institutions. The Corps of Engineers provided transportation and guides for the work in two reservoir areas. Temporary headquarters and living accommodations were made available at several projects. The construction agency in several instances made mechanical equipment available to assist in heavy excavations. The University of Washington at Seattle provided a base of operations and laboratory space for the Snake River party, while the University of Georgia furnished similar accommodations for the party working at the Hartwell Reservoir in Georgia. The field personnel of all the agencies was particularly helpful to the party leaders from the River Basin Surveys and expedited their activities in numerous ways. The National Park Service continued to serve as the liaison between the various agencies both in Washington and in the field. It also prepared the estimates and justifications needed to procure funds to support the Salvage Program. Throughout all the Park Service regions the regional directors and members of their staffs cooperated whole-heartedly in the program.

The main office in Washington continued general supervision of the program, while the field headquarters and laboratory at Lincoln,

Nebr., was responsible for the activities in the Missouri Basin and in addition provided the base of operations for several of the parties working in adjacent areas. The materials collected by excavating parties in the Missouri Basin as well as those from the Snake River and reservoir areas in southeastern Kansas and in Arkansas were processed at the Lincoln laboratory.

Washington office.—The main headquarters of the River Basin Surveys continued throughout the year under the direction of Dr. Frank H. H. Roberts, Jr. Carl F. Miller, archeologist, was based at that office and from time to time assisted the Director in some of the general administrative problems. In October Joseph R. Caldwell was appointed as temporary archeologist to carry on the project at the Hartwell Reservoir in Georgia, with field headquarters at the University of Georgia in Athens. His work was completed and his appointment terminated on April 6, 1957. Dr. Robert E. Greengo joined the staff as an archeologist on a temporary appointment March 6 for the purpose of making the preliminary survey at the Dardanelle Reservoir project in Arkansas. Dr. Greengo proceeded from Washington to Lincoln, Nebr., where he obtained the necessary equipment for his fieldwork and went from there to Arkansas. The general administration of his field investigation was from the Lincoln office. Upon the completion of the survey, Dr. Greengo returned to Lincoln where he prepared his report. He subsequently returned to Washington, and his employment was terminated on May 4. From the beginning of the fiscal year until the latter part of August William M. Bass served as a temporary physical anthropologist studying the skeletal material collected by various parties in the Missouri Basin. He returned to duty on June 3 and resumed his work on the bones. He was occupied with that task at the end of the fiscal year. Although technically a member of the staff of the Washington office, Dr. James H. Howard, archeologist, reported to the Lincoln office on May 13 and worked under its supervision in the Toronto Reservoir area in Kansas. His work there was completed by the end of the year, and it was contemplated that he would be shifted to the Missouri Basin Project. Dr. Warren W. Caldwell, who was in charge of the Snake River field party at the beginning of the fiscal year, was shifted by the Washington office to the Missouri Basin Project in August. His place for the remainder of the field season was taken by George L. Coale, who served as a temporary archeologist until December 15. After being appointed a member of the regular Missouri Basin staff, Dr. Caldwell was detailed to the Coralville project in Iowa for the period from August 28 to October 13. He subsequently returned to the Lincoln headquarters, and all his later activities were in connection with the Missouri Basin Project.

At the beginning of the fiscal year Mr. Miller was in charge of an excavating party in the Oahe Reservoir area, and his activities there are described in the section of this report pertaining to the Missouri Basin. After he returned to Washington in September, he prepared a brief report on the results of the work in South Dakota and then resumed writing on his unfinished report concerning investigations previously made at the John H. Kerr (Buggs Island) Reservoir, Va. In January he selected material from the collections made at the Clark Hill Reservoir in Georgia and prepared an exhibit to be sent to the office of the Corps of Engineers at the Clark Hill Dam in Georgia. During the fall and winter months Mr. Miller gave talks before a number of societies and school groups in the Washington area about the work that he had done at Russell Cave in Alabama while on detail to the regular Bureau of American Ethnology staff in the closing months of the previous fiscal year. Early in April he left for the Warrior Lock and Dam Project area on the Black Warrior River in Alabama and proceeded to carry on a preliminary survey to determine if archeological materials would be involved in the construction at that locality. He completed the survey on April 26, reporting that no significant materials would be lost as a result of that project. On April 27 Mr. Miller proceeded to Little Rock, Ark., for the purpose of making a preliminary survey of the Greers Ferry Reservoir area, but because of heavy rains and exceptionally high water in the area it was necessary to postpone that investigation indefinitely. From Little Rock he went to South Pittsburg, Tenn., to resume work at Russell Cave. On May 6 he was again transferred from the River Basin Surveys staff to the Bureau of American Ethnology for the period of the Russell Cave investigation and at the end of the fiscal year was still in that status. During the month of May Mr. Miller gave talks on his work at Oak Ridge, Tenn., and at Birmingham, Ala. In June he participated in a special televised educational program and spoke before several societies in Tennessee and Alabama.

Alabama.—A survey of the Warrior Lock and Dam Project was made during April. No sites of importance were found in the area to be flooded. However, a number of significant sites which merit study under other than salvage auspices were discovered adjacent to the pool area.

Arkansas.—From March 14 to April 20 a preliminary survey was made of the Dardanelle Reservoir area on the Arkansas River. Fifty-two sites were located and recorded and limited testing was recommended for 23 of them. A preliminary appraisal report was completed in May. A proposed survey of the Greers Ferry Reservoir area had to be postponed because of high waters.

Georgia.—During the period October 25, 1956, to March 23, 1957, in the Hartwell Reservoir area on the Savannah River, a large mound

was excavated at the site of the lower Cherokee town of Tugalo near Toccoa. There are several historical references to the location dating back to about 1715. The village area at the site had previously been explored, but the mound had not been touched. The mound excavations uncovered four superimposed pottery dumps representing a clear continuity from historic Cherokee well back into prehistoric Cherokee. This represents the first known sequence within prehistoric Cherokee materials. Below the Cherokee deposits with a break in continuity was a burned mound and a sequence extending backward through four stages to the beginning of the mound construction. The remains of earth-lodge temples were found on three of the levels and the traces of another type structure were uncovered on the fourth or lowest level. The latter rested on deposits indicating another break in continuity beneath which there was evidence of occupation by a group that has been called Late Middle Creek culture which is believed to date about A. D. 500. The ceramic material obtained from the excavations provides one of the longest pottery sequences ever found in the Georgia area. The work at the Tugalo Mound was a cooperative project in that labor for the digging was provided by the Georgia Historical Commission and a vehicle for transportation and equipment needed in the investigations was supplied by the Department of Anthropology of the University of Georgia.

Iowa.—During the period August 28 to October 13 an excavating party from the River Basin Surveys working in the Coralville Reservoir area completely excavated one rock shelter and tested two others. Three open occupation sites were dug and three others tested. Two mounds were also excavated. The materials obtained demonstrate that the peoples living there had a basic Woodland Culture with some later Mississippi traits. The relationship was predominantly toward the East, but some influences from the Plains were in evidence.

Kansas.—During September and October a survey-testing party operated in the Toronto Reservoir area on the Verdigris River in southeastern Kansas. As a result of its investigations, seven sites were recommended for partial excavation or testing. On May 15 an excavating party proceeded to the area and by the end of the fiscal year had dug in eight sites, one of which was found by the excavating party and had not previously been reported. Six of the sites studied were occupation areas in the open and the other two were rock shelters. The materials obtained there indicate several cultural relationships. There is evidence for Upper Republican, Keith-Focus Woodland, Archaic, and Kansas City Hopewell. The full significance of the information and specimens obtained will not be apparent until detailed studies have been made in the laboratory. No additional work will be required at the Toronto Reservoir.

Missouri Basin.—The Missouri Basin Project continued to operate throughout the year from the field headquarters and laboratory at 1517 O Street, Lincoln, Nebr. Dr. Robert L. Stephenson served as chief of the project throughout the year. Activities included work on all four phases of the Salvage Program: (1) Survey, (2) excavation, (3) analysis, and (4) reporting. The first two phases were emphasized through the summer months and the second two during fall and winter.

At the beginning of the fiscal year the staff, in addition to the chief, consisted of two permanent archeologists, two archeologists detailed to the project from the Washington office, three temporary field assistants, one field and laboratory assistant, one administrative assistant, one museum aide, one photographer, one clerk-stenographer, and one half-time records clerk. There were 28 temporary laborers in the employ of the field parties. At the end of the 1956 field season all temporary employees, with the exception of one field assistant and a survey party chief, were terminated. The men detailed to the project for the season returned to their regular duties in Washington in September, and the temporary field assistant and survey party chief were terminated in January. During the year two permanent archeologists were added to the staff and four temporary archeologists were employed for the 1957 field season. In June one archeologist and one field assistant were again detailed from Washington for work in the field. At the Lincoln office one clerk-typist, one part-time draftsman, one laboratory assistant, and one part-time laboratory assistant were appointed. At the end of the year there were 76 temporary laborers employed by the field parties.

During the year 16 River Basin Surveys field parties were active within the Missouri Basin, while 4 others working in reservoirs outside the Basin also operated from the Project office in Lincoln. Of the 16 Missouri Basin parties, 1 was at work in July, August, and September in the Big Bend Reservoir area, South Dakota, and 5 parties were at work there in June. One party was at work in the Fort Randall Reservoir for a brief time in September. Four parties worked in the Oahe Reservoir in July and August and four other parties were there in June; one field party conducted excavations in the Lovewell Reservoir in Kansas in July and August. The four parties operating outside the Missouri Basin were concerned with the Coralville Reservoir in Iowa, the Toronto Reservoir in Kansas, and the Dardanelle Reservoir in Arkansas.

Other fieldwork in the Missouri Basin during the year included nine field parties from State institutions working under agreements with the National Park Service and in cooperation with the Smithsonian Institution. Parties from the Universities of South Dakota and Wisconsin and from the North Dakota State Historical Society

were in the field in the July-October period. Parties from the Universities of South Dakota, Idaho, Kansas, Missouri, Wyoming, and the State Historical Society of North Dakota were in the field in the May-June period.

A River Basin Surveys party, directed by Robert W. Neuman, was in the field at the beginning of the fiscal year and completed 10 weeks of excavation in four sites along White Rock Creek in the Lovewell Reservoir area in Jewell County, Kans. Three of the sites were fairly extensive but did not yield much material. The artifacts found suggest that they may belong to the White Rock Aspect. The latter is so poorly known that the evidence recovered from them should, even though scanty, clarify the picture greatly. The fourth site was a moderate-sized burial mound of the "Middle Woodland" period. Unfortunately it had been partially destroyed in earlier years by pot-hunting activity. The profile and structure of the mound were, however, readily discernible, and enough material was recovered to identify readily its cultural relationship. Fragments of human and other bones were recovered along with cord-marked potsherds and other artifacts, including two small shell gorgets. No further work is anticipated for the area to be flooded by the waters of the Lovewell Reservoir.

On September 21 and 22 further investigations were made immediately adjacent to the Oldham Site in the Fort Randall Reservoir in South Dakota in an area in which burials and artifacts had been exposed by wave action and lowering of the reservoir. This site had been partially excavated in previous years, and it was hoped that the recent return there would produce additional important evidence. Furthermore there was an opportunity to determine whether a site once flooded could yield worthwhile archeological information if the water receded and left it exposed. Unfortunately, this work produced no new evidence concerning the occupations of the site, even though some artifacts were collected. The ground, though 10 feet above the water level, was too saturated and disturbed to provide any useful information about relationships to the house features, village, or other previously collected material. The work demonstrated conclusively that sites must be dug before they are flooded.

A survey-testing party, directed by Harold A. Huscher, at the beginning of the fiscal year was conducting an intensive survey of the Big Bend Reservoir area, which is situated between the upper reaches of the Fort Randall Reservoir and the Oahe Dam, on the Missouri River, in central South Dakota. The party of three was in the field for 15 weeks and located, visited, and recorded 129 new archeological sites and revisited 26 previously known. Detailed field maps were made of approximately one-quarter of these sites and about one-third of them were tested. Many of them are large and productive and

material from them should fill in some of the gaps in present knowledge of the prehistory of the area, particularly for the period from about A. D. 1000 to 1700.

Several military and trading posts pertaining to the early 19th century were also located in the area. Of particular interest is a site that may belong to the period of the Spanish-Colonial post of Regis Loisel (ca. 1802-03). Several interesting prehistoric sites appear to have had rectangular earth lodges arranged in rows, much the same as at the Huff site in North Dakota. Among other significant manifestations are a boulder effigy site, "Middle Woodland" sites, and sites that appear to be nonceramic.

At the beginning of the 1957 field season in mid-June, there were five field parties in the Big Bend Reservoir area. G. Hubert Smith and a party of nine were at work at the end of the fiscal year excavating the 19th-century historic trading post of white origin known as Fort Defiance (or alternatively Fort Bouis). This same party anticipates investigations at two other 19th-century historic sites in the area when it has completed the season's work at Fort Defiance-Bouis. Dr. Warren W. Caldwell and a party of nine at the end of the fiscal year were excavating the remains of an earth-lodge village which appears to have had three occupations, including a Middle Woodland component. Robert W. Neuman and a party of 10 were excavating a series of three linked earth-lodge village sites on the left bank of the Missouri River in the vicinity of Old Fort Thompson. William N. Irving and a party of nine were also working on the left bank of the Missouri River in the vicinity of Old Fort Thompson. They were starting test excavations in a series of 14 sites and will make a map of each village pattern. Harold A. Huscher and a party of two were preparing to start reconnaissance and mapping of sites and scouting for new sites in the entire area of the Big Bend Reservoir at the end of the fiscal year. None of the five parties had been in the field long enough by the end of the fiscal year to provide specific reports of results.

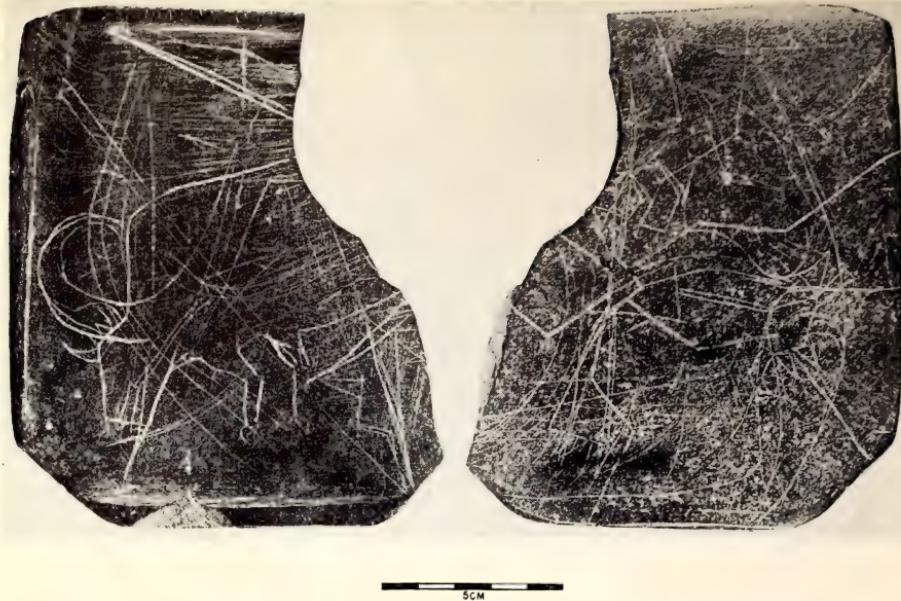
A River Basin Surveys party, directed by G. Hubert Smith, was in the field in the Oahe Reservoir area at the beginning of the fiscal year and completed nine weeks of excavation at a late historic trading-post site near the Oahe Dam on July 31. This party excavated the stockade outline and the remnants of several interior structures, and recovered a considerable amount of object material representing the period about 1860. The site is believed to be that of Fort Pierre II, which was occupied after the abandonment of Fort Pierre I in 1858. Structural remains were found but a few inches below the plow zone, and in some instances much had been destroyed by plowing over the years. A road patrol was used for clearing away the overburden and very satisfactorily exposed the stockade and other structural features. The



1. Excavating in rock shelter in the Coralville Reservoir area.



2. Tracing the locations of buildings and the stockade at the site of Fort Pierre II.



1. Two sides of catlinite plaque with engraved decorations. The plaque was found in the bottom of a cache pit at the Sully site, in the Oahe Reservoir area, near Pierre, S. Dak.



2. Portion of burial area at the Cheyenne village site.

stockade proved to be approximately 220 feet square. Other structural features included a warehouse, a cellar, and a dwelling. Among the objects recovered were two coins dated 1857, glass beads, a religious medallion, several small catlinite balls, and a great mass of hand-wrought iron. No further work is contemplated at that site.

A second River Basin Surveys party in the Oahe Reservoir area, directed by Dr. Waldo R. Wedel, was in the field at the beginning of the fiscal year and completed 12 weeks of digging on August 25. This party was continuing excavations begun in previous years at the Cheyenne River site at the mouth of the Cheyenne River. Three definite occupations of the site were identified. The earliest was a rectangular-house component. The middle one was a circular-house component, and the final occupation was protohistoric Arikara, with circular houses. An encircling stockade and defensive ditch were discovered and excavated, but the specific occupation to which it belonged was not definitely determined. It presumably belonged to one of the two early occupations. A large burial area was excavated and the remains of over 50 individuals were recovered. The burials, in small pits placed close together, were flexed and in most cases had been covered with poles or wooden slabs. The burials almost certainly were from the Arikara occupation. Some artifacts, including pottery and a fine catlinite pipe, were recovered from the graves. The 1956 season's excavations at the Cheyenne River site completed the investigations planned for that location.

A third River Basin Surveys party in the Oahe Reservoir area, directed by Carl F. Miller, was in the field at the beginning of the fiscal year and completed 9 weeks of digging on August 24. This party of nine began, and brought to satisfactory completion, the excavation of the Hosterman site on the Missouri River near Whitlocks Crossing, S. Dak. At that site evidence was found of a stockade consisting of a double row of posts. Several refuse pits, cache pits, and other similar features were excavated, including pits containing large sections of articulated bison bones. The latter appear to have been slaughtering areas. House structures presented a difficult problem as post holes were dim and difficult to identify. One structure was fairly clear in its outline, but the entrance was not located. Artifacts were moderately abundant and suggest that a single occupation, perhaps of short duration, will be established for the site when analysis of the material has been completed. No further work is contemplated at that location.

The fourth River Basin Surveys party in the Oahe Reservoir area, directed by Dr. Robert L. Stephenson, began work on July 2 and completed 6 weeks in the field on August 10. This party of 10 conducted a testing operation at the Sully site some 20 miles above Pierre on the left bank of the Missouri River. The site is that of the largest known

earth-lodge village on the river, and two objectives were accomplished during the season. First, a detailed map was made of the area and the site itself was staked off in 100-foot blocks. Second, a 5-foot-square test was excavated at each 100-foot stake along the north, south, east, and west base lines. In addition, two test trenches were dug and a house quadrant was excavated. The testing procedure was to obtain both horizontal and vertical distribution patterns of specimens and features over the entire site. From the analysis of such distributions, it was possible to plan for the recovery of a maximum amount of information about the site as a whole from a minimum amount of excavation in the 1957 season. The site is nearly 4,000 feet long and 1,500 feet wide and may contain the remains of as many as 400 house structures. More than half that number are identifiable on the surface as unquestionable structures, and an almost equal number appear as possible house structures. They range from 25 feet to over 60 feet in diameter. What were probably four ceremonial lodges are each almost 90 feet in diameter. There is clear stratigraphy in the site, with structures underlying a sterile zone, which in turn underlies a refuse heap. Cache pits are abundant and range from small pocket caches to large bell-shaped pits 7 feet deep and of equal diameter. Artifact material is abundant, and pottery sherds found there suggest at least three, and probably four, occupations. An outstanding specimen, a catlinite plaque with animal designs engraved on both sides, was found in one cache pit. Two certain burial areas, possibly several others, were located but not tested. No fortification ditch or stockade was observed.

Cooperating institutions in the Oahe Reservoir area at the beginning of the fiscal year included a party from the University of South Dakota directed by Roscoe Wilmeth, a party from the University of Wisconsin directed by Dr. David A. Baerreis, and a party from the State Historical Society of North Dakota directed by Alan R. Woolworth.

At the start of the 1957 field season in mid-June, there were four River Basin Surveys parties in the Oahe Reservoir area. Dr. Waldo R. Wedel, again detailed to the project by the United States National Museum, and a party of 10 were excavating the Black Widow site and testing six others nearby in the Fort Bennett area on the right bank of the Missouri River. The Black Widow site was sampled in 1952 by a River Basin Surveys party. Since the material from it suggested affiliations with the site completed by Dr. Wedel in 1956, an extensive excavation was deemed advisable. The adjacent sites to be tested during the 1957 season seem to be a part of the same complex. Donald D. Hartle and a party of eight were making test excavations in a series of 30 sites on the right bank of the Missouri River in the Fort Bennett

area at the end of the fiscal year. A house or two and several cache pits will be dug in each, and a map made of each village plan and site location. Dr. Robert L. Stephenson and a party of 25 were at work at the end of the fiscal year at the Sully site where preliminary studies were made the previous season. The major effort will be the excavation of that site, but seven other small nearby sites that may be related to it will be tested. Charles H. McNutt and a party of eight were making test excavations at 14 sites on the left bank of the Missouri River in the general vicinity of Old Fort Sully. They were excavating a house or two and several cache pits in each and making a map of the village plan and site location. None of these parties had been in the field long enough, at the end of the fiscal year, to report any specific results.

In May and June Dr. Theodore E. White, National Park Service geologist at Dinosaur National Monument, was detailed to the Missouri Basin Project for a period of 6 weeks. During that time Dr. White made an osteological analysis, in the Missouri Basin Project laboratory, of all of the unworked animal bones from the sites excavated over the past four field seasons by the Smithsonian Institution's River Basin Surveys field parties. Work was also done on bones collected by field parties of several of the cooperating institutions. This included over 300,000 individual bones from 63 archeological sites in eight reservoir areas. Dr. White selected numerous specimens for the Missouri Basin Project's comparative collection and set aside others that will be sent to the United States National Museum for further study or for exhibit purposes. The bulk of the identified bone materials remaining was transferred to the Nebraska State Museum. Dr. White amassed voluminous notes on this bone material for use in continuing his series of reports on "Butchering Techniques of Aboriginal Peoples." Material was gathered for at least eight additional papers in this series. Seven have already been published. One of the particularly interesting results of this osteological analysis was the identification of the remains of a number of unusually large dogs in the canid material.

During the time the archeologists were not in the field, they were engaged in analyses of their materials and in laboratory and library research. They also prepared manuscripts of technical scientific reports and wrote articles and papers of a more popular nature. The laboratory and office staff devoted its time to processing specimen materials for study, photographing specimens, preparing specimen records, and typing and filing records and manuscript materials. The accomplishments of the laboratory and office staff are listed in the following tables.

TABLE 1.—*Specimens processed July 1, 1956, through June 30, 1957*

Reservoir	Number of sites	Catalog numbers assigned	Number of specimens processed
Big Bend	114	3, 336	24, 602
Coralville	9	878	3, 088
Dardanelle	51	1, 191	1, 384
Fort Randall	5	157	2, 004
Gavins Point	3	10	11
Lovewell	8	2, 198	5, 689
Oahe	20	9, 303	140, 630
Toronto	35	536	862
Sites not in reservoirs	5	81	679
Collections not assigned site numbers	250	17, 690	178, 949
	4	23	57
			179, 006

As of June 30, 1957, the Missouri Basin Project had cataloged 749,244 specimens from 1,725 numbered sites and 50 collections not assigned site numbers.

Additional specimen transfers were made, all to the United States National Museum, as follows: Human skeletal remains from 3 sites in the Oahe Reservoir area; bird bone from 23 sites in 5 reservoirs; fish bone from 9 sites in 3 reservoirs; and unworked shell from 2 sites in 2 reservoirs.

TABLE 2.—*Record materials processed*

Reflex copies of records	11, 879
Photographic negatives made	1, 984
Photographic prints made	7, 945
Photographic prints mounted and filed	3, 990
Plate layouts made for manuscripts	10
Transparencies mounted in glass	959
Cartographic tracings and revisions	70

During October 25–27 the annual meetings of the Mountain-Plain Historical Association were held in Lincoln and the Missouri Basin Project staff served as one of the local host organizations. As a programed part of the meetings the group was invited to tour the facilities at the Project laboratory. During the Thanksgiving weekend members of the staff participated in the 14th Plains Conference for Archeology, held in Lincoln. On April 27 members of the staff participated in the annual meeting of the Nebraska Academy of Sciences. May 2, as a programed part of the meetings of the Missouri Basin Inter-Agency Committee being held in Lincoln, the group was given a conducted tour of the Missouri Basin Project facilities.

There were over 30 members who visited the laboratory. During the annual meeting of the American Association of Museums held in Lincoln, May 21-25, the Missouri Basin Project served as one of the local host organizations. Staff members participated throughout the meetings.

Dr. Robert L. Stephenson, chief, when not in charge of field parties, devoted most of his time to managing the office and laboratory in Lincoln and preparing plans for the 1957 summer field season. He spent some time working on a summary report of the Missouri Basin Salvage Program for the calendar years 1952-55 and wrote several short papers for presentation before scientific groups. In January he attended and participated in the annual meeting of the Committee for the Recovery of Archeological Remains held in Washington, D. C. On April 9 he spoke before the Kansas City Archeological Society on the "Progress of Salvage Archeology in the Missouri Basin." On April 12 he went to Mitchell, S. Dak., where he was moderator for the afternoon session of the annual meeting of the South Dakota Social Sciences Association. The main topic under consideration was "South Dakota Prehistory" and at the end of the session Dr. Stephenson summarized the discussions and emphasized the needs of salvage archeology in the area. He served as chairman of the Anthropological Section of the Nebraska Academy of Sciences at its annual meeting held in Lincoln on April 27. At that time he also presented a paper on "Emerging Problems in Missouri Basin Archeology." On May 1, by special invitation, he presented a paper, "How Has Archeology Contributed to Our Historical Knowledge?" before one of the sessions of the Missouri Basin Inter-Agency Committee which was meeting in Lincoln. When the annual meeting of the American Association of Museums was held in Lincoln May 21-25, Dr. Stephenson served as a co-host and also was chairman for a program of Indian dances presented at an evening gathering. At one of the regular sessions, he spoke on the subject "Archeological Salvage Field Trips."

Dr. Warren W. Caldwell, archeologist, joined the staff of the Missouri Basin Project on August 22 and, as previously mentioned, was detailed for work at the Coralville Reservoir in Iowa. During the fall and winter months after his return from the field, he prepared a report on the work he had done along the Snake River just prior to joining the Missouri Basin Project, and completed a report on the results of his investigations in Iowa. He participated in several scientific meetings, presenting papers before sessions of the 14th Plains Conference for Archeology and the Nebraska Academy of Sciences. During the year two papers, of which he was a coauthor, were published: "A Burial Cache from the Spokane Region," American Antiquity, vol. 22, No. 1, and "The Problem of Northwest Coastal Interior Relationships as Seen from Seattle," American Antiquity,

vol. 22, No. 2. On June 1 Dr. Caldwell made a brief reconnaissance with G. Hubert Smith in the Big Bend Reservoir area for the purpose of determining where a camp should be established for the coming season's fieldwork and also for inspecting the sites where he expected to work. On June 11 he and his party moved into the field and were engaged in excavations at the end of the year.

Donald D. Hartle, temporary archeologist, joined the Missouri Basin Project staff on June 6 and on June 12 left the field headquarters with a party to begin excavations at several sites in the Oahe Reservoir area. Mr. Hartle was formerly a full-time member of the staff at Lincoln and is still working on reports of work which he did at that time. He was in the field at the end of the fiscal year.

Harold A. Huscher, field assistant and temporary archeologist, was working in the Big Bend area at the beginning of the fiscal year, and his activities there have been discussed in a preceding paragraph. After his return to the Lincoln headquarters in the fall, he devoted several months to the preparation of a preliminary appraisal report on his summer's work. In his report he made specific recommendations for an excavation program in the area during the 1957 field season. He left the project in January to complete work he was doing for the Department of Justice but returned in the capacity of a temporary archeologist late in June and proceeded to the Big Bend area where he was just beginning a survey program at the end of the fiscal year.

William N. Irving, temporary archeologist, joined the Project staff June 10 and on June 12 left Lincoln in charge of a party to begin the excavation of a series of sites in the Big Bend Reservoir. His activities there to the end of the fiscal year have previously been described.

Alfred E. Johnson, field archeologist and subsequently survey party chief, was in the field at the beginning of the fiscal year as a member of the Big Bend survey party under the direction of Mr. Huscher. In October he took over the task of making a survey and tests in the Toronto Reservoir area. He was in the field until mid-November when he resumed his academic work at the University of Kansas. He remained a part-time member of the staff, however, until early in January and during that period completed a report, "An Appraisal of the Archeological Resources of the Toronto Reservoir." Mr. Johnson did not rejoin the Project staff when fieldwork was resumed in the spring but went as an assistant with the party from the University of Kansas which was working in the Tuttle Creek Reservoir area at the end of the year. His Toronto report was in the process of being mimeographed on June 30.

Charles H. McNutt, archeologist, was appointed a member of the permanent staff of the Project on June 10. He devoted the following

week to learning the routine of the laboratory and Project office and on June 19 left Lincoln in charge of a party to start a series of test excavations in sites in the Oahe Reservoir area. His activities in that connection have already been discussed.

Robert W. Neuman, field assistant and archeologist, was in charge of an excavating party at the Lovewell Reservoir in Kansas at the beginning of the fiscal year and worked there until August. After returning to the Lincoln headquarters, he resigned from the Project in order to resume his academic work at the University of Nebraska. During the fall and winter months, however, he continued work on his report of the results of the excavations in the Lovewell area and returned to the Project as a part-time employee in May. On June 10 he was appointed temporary archeologist and left Lincoln with a field party on June 12 to begin excavations in a series of sites in the Big Bend area where he was occupied at the end of the fiscal year. Mr. Neuman participated in the annual meeting of the Nebraska Academy of Sciences on April 27, presenting a paper summarizing the results of his studies at the Lovewell Reservoir.

G. Hubert Smith, archeologist, during the periods he was at the field headquarters in Lincoln, devoted his time to analyzing the materials obtained from his field investigations and preparing reports on the results of his work. A 75-page manuscript on the findings made at the site of Fort Pierre II during the 1956 field season was completed. Mr. Smith also prepared an illustrated article on "Archeological Salvage at Historic Sites in the Missouri Basin," which was published in the Missouri Basin Field Committee Progress Report for March. During a 6-week period in February and March, Mr. Smith was detailed to the National Capital Parks, National Park Service, Washington, D. C., in order to make archeological investigations at the oldest known surviving building in the District of Columbia. The structure was built in 1766 and is known as the Old Stone House. Inasmuch as it was being restored, it was deemed advisable to make an archeological study of it before too much work was done on it. Mr. Smith found a number of interesting facts about the physical history of the structure and prepared a report on them for the National Capital Parks. At the request of the Minnesota Historical Society, Mr. Smith spent a week in Saint Paul where he assisted in planning future investigations of historic sites in that State and in checking over results of previous undertakings of that nature. Mr. Smith participated in the various scientific meetings held at Lincoln during the year, presenting papers pertaining to his work at Fort Pierre II and discussing "The Present Status of Research on Early Historic Sites of the Missouri Basin." In April he gave an illustrated talk on "Dakotans before the White Man" at the 18th annual meeting of the South Dakota Social Sciences Association. During May he took part in a meeting of

the Committee on Historic Sites of the Mississippi Valley Historical Association held at Lincoln. On June 10 Mr. Smith left with a field party for the Big Bend Reservoir area and at the end of the fiscal year was engaged in excavations previously described.

Richard P. Wheeler, archeologist, was at the Lincoln headquarters during the entire year. Most of his time was spent completing a lengthy detailed manuscript pertaining to archeological remains in the Angostura Reservoir area, South Dakota, and the Keyhole and Boysen Reservoir areas in northeastern and west-central Wyoming. The manuscript is based on data gathered by reconnaissance parties of the Missouri Basin Project during the period 1946-51 and information obtained by excavating parties in 1950-52. Mr. Wheeler served as general chairman of the 14th Conference for Plains Archeology in November and presented a paper, "Archeological Field Data and Their Interpretation," at the annual meeting of the Nebraska Academy of Sciences in April. In May he gave an illustrated talk before the Interprofessional Club of Lincoln on the subject "Some Recent Archeological Discoveries in the Missouri Basin." Mr. Wheeler was in the Lincoln office at the end of the fiscal year.

The activities of Dr. Robert E. Greengo and Dr. James H. Howard, archeologists, who were temporarily based at the headquarters of the Missouri Basin Project, have been discussed elsewhere and need no further comment.

Snake River Basin.—At the beginning of the fiscal year a field party was excavating in sites along the Snake River in the area where the Idaho Power Co. is building its Brownlee and Oxbow dams. Test digging was done in a number of sites, and extensive excavations were carried on in four habitational areas. Two of the latter were on the Oregon side of the Snake River at Robinette and two on the Idaho side at Big Bar. Most of the material found there indicates that the sites date from the late prehistoric period to the early period of European contact but at two of the locations there were items representing much earlier horizons. The general picture obtained by the investigations is that of an early expansion of Great Basin cultural features into the Northwest and their replacement by a more dynamic cultural pattern working upstream from mid-Columbia centers. The artifacts collected show that the people had a basically hunting-gathering type of economy. Implements associated with fishing were for the most part lacking but an abundance of fresh-water mussel shells in the middens indicates that aquatic food was actually consumed. Such evidence as was found pertaining to habitations suggests that rather flimsy brush superstructures were erected over saucer-shaped floor areas. At the time of the arrival of the first Europeans, that area was inhabited by a band of the Shoshoni known as the "Mountain Sheep Eaters." They were a seasonal nomadic group subsisting mainly by

hunting and gathering activities. They have not been known to visit the region regularly since the 1880's and their survivors are now mainly on reservations in Idaho and Oregon.

Cooperating institutions.—Several State and local institutions continued to cooperate in the Inter-Agency Salvage Program throughout the year. In addition to those previously mentioned for the Upper Missouri Basin Area, the University of Missouri began a survey of the Pomme de Terre Reservoir on the river of the same name in Missouri and continued its investigations in the Table Rock Reservoir area on the White River. The University of Kansas started a series of investigations in the Tuttle Creek Reservoir basin in Kansas, and the University of Wyoming excavated in the Glendo Reservoir area in Wyoming. In New Mexico the School of American Research began a survey of the Navajo Project, and in Arizona the Museum of Northern Arizona started a salvage program in the Glen Canyon Reservoir basin. The University of Utah also participated in the Glen Canyon investigations. The University of Texas had an excavation program in the Ferrells Bridge area. The University of Oklahoma worked in the Keystone and Oolagah Reservoirs in that State. In California investigations were made in the Monticello Reservoir area by Sacramento State College and at the Trinity River Project by the University of California at Berkeley. At the Dalles Reservoir on the Columbia River, the University of Oregon excavated on the Oregon side of the river and the University of Washington on the north side. Washington State College started an excavation project in the Ice Harbor Reservoir basin.

ARCHIVES

The manuscript collections of the Bureau continued to be utilized by anthropologists and other students. About 222 manuscripts were consulted by searchers, either in person or through the purchase of reproductions. In addition, 95 mail inquiries concerning manuscripts were received and numerous manuscripts were consulted by the archivist in preparing replies. As in previous years, as individual manuscript files were called into use, their contents were reviewed and more fully recorded in the catalog; numerous annotations were made and about 55 new entries drafted. A number of new descriptive lists of manuscripts having to do with specific tribes or subjects were also prepared for distribution.

Utilization of the Bureau's photographic collections by scholars, publishers, and the general public as a source of documentary information and illustrative material continued to increase. There were 444 inquiries and purchase orders for photographs (as against 294 in 1956); and 1,019 prints were distributed (978 in 1956). The archivist continued to prepare lists describing photographs available for specific subjects or tribes; 65 such lists are now available.

A number of photographic collections relating to specific areas were studied by specialists, who not only derived useful historical information from them for their own studies, but in turn were able to supply for the Bureau records numerous additional details concerning the identification of subject, locality, etc., thus increasing the value of the collections to future users.

Over 400 photographic views of Mesa Verde, Colo., and vicinity, made and collected by J. W. Fewkes in the period 1908-22, were studied by members of the National Park Service staff at Mesa Verde National Park; fuller identifications and descriptions were provided for many of these by the Park staff. About 40 of the pictures were considered of especial historical interest and were copied by them for the Mesa Verde files.

A series of 124 photographs of ruins in Chaco Canyon, N. Mex., made by Victor Mindeleff in 1887 was studied by National Park Service archeologists at Chaco Canyon National Monument, N. Mex., and Southwestern National Monuments, Globe, Ariz. They identified a number of previously unidentified views and provided details of locality and additional notes on others.

These series are of considerable historical interest in that they show ruins in states of preservation and repair differing from their present state; a few show ruins that are no longer standing.

Additional caption information was provided by Dr. Harold C. Conklin of Columbia University for a group of 121 photographs of native peoples of the Philippine Islands made and collected by Col. Dache M. Reeves prior to 1938.

Several members of the Cheyenne and Arapaho tribes, who were in Washington on business, visited the Archives and provided additional identifications and other information about photographs of Cheyennes and Arapahoes taken in the early 1900's.

During the year a number of new photographs were added to the collections through gift or loan for copying.

Twenty-two photographs of Chippewa, Ottawa, and Potawatomi Indians living in the State of Michigan during the period 1853-ca. 1920 were lent for copying by the Michigan Historical Commission, through Dr. Philip P. Mason, archivist.

Dr. Paul H. Ezell, of the Department of Anthropology, University of San Diego, San Diego, Calif., lent for copying 11 photographs relating to the Pima Indians; they range in date from 1896 to 1954.

Twenty-five original photographic prints relating to a number of Plains and Southwestern tribes were received as a gift from the Pennsylvania State Museum, Harrisburg, Pa., through John Witthoft, director. Most of the photographs were made in the early 1880's by the photographic firm of Baker and Johnston.

A gift of 26 glass negatives of outdoor and studio portraits of Indians of the Southwest, principally Apaches, was made by Dr. E. M. Wurster of Williamsport, Pa., through John Witthoft, of the Pennsylvania State Museum. The photographs are believed to have been taken by a photographer named Eames.

Two groups of photographic prints were obtained for reference purposes from other institutions (which retain the negatives and the right to grant publication permission). Both groups are photographs of drawings made by Robert Ormsby Sweeny in Minnesota in 1852, the year in which he first settled in St. Paul. One set of prints was received from the British Museum and was made from that institution's collection of 20 original drawings by Sweeny. Another set of 20 photographs represents a selection from a group of more than 60 Sweeny drawings pertaining to Indian subjects in the collections of the Minnesota Historical Society.

ILLUSTRATIONS

The illustrator on the staff of the Bureau devoted his time to the preparation of a variety of maps, graphs, and diagrams, the designing of charts, the restoration and retouching of photographs, and the preparation of various other illustrative work. An appreciable amount of time was allocated to making drawings for other departments of the Institution.

EDITORIAL WORK AND PUBLICATIONS

There were issued one Annual Report, two Bulletins, and one miscellaneous publication, as follows:

Seventy-third Annual Report of the Bureau of American Ethnology, 1955-1956.
ii+23 pp., 2 pls. 1957.

Bulletin 161. Seminole music, by Frances Densmore. xxviii+223 pp., 18 pls., 1 fig. 1956.

Bulletin 162. Guaymí grammar, by Ephraim S. Alphonse. ix+128 pp. 1956.
Miscellaneous publication. List of publications of the Bureau of American Ethnology, with index to authors and titles. Revised to June 30, 1956. 112 pp. 1956.

The following publications were in press at the close of the fiscal year:

Bulletin 164. Anthropological Papers Nos. 49-56:

No. 49. The Ormond Beach Mound, east central Florida, by Jesse D. Jennings, Gordon R. Willey, and Marshall T. Newman.

No. 50. Hair pipes in Plains Indian adornment, a study in Indian and White ingenuity, by John C. Ewers.

No. 51. Observations on some nineteenth-century pottery vessels from the Upper Missouri, by Waldo R. Wedel.

No. 52. Revaluation of the Eastern Siouan problem, with particular emphasis on the Virginia branches—the Occaneechi, the Saponi, and the Tutelo, by Carl F. Miller.

Bulletin 164. Anthropological Papers Nos. 49-56—Continued

No. 53. An archeological reconnaissance in southeastern Mexico, by Matthew W. Stirling.

No. 54. Valladolid Maya enumeration, by John P. Harrington.

No. 55. Letters to Jack Wilson, the Paiute Prophet, written between 1908 and 1911, edited by Grace M. Dangberg.

No. 56. Factionalism at Taos Pueblo, New Mexico, by William N. Fenton.

Bulletin 165. Music of Acoma, Isleta, Cochiti, and Zuñi Pueblos, by Frances Densmore.

Bulletin 166. River Basin Surveys Papers, No. 8. Excavations in the McNary Reservoir Basin near Umatilla, Oregon, by Douglas Osborne. With appendixes by Marshall T. Newman, Arthur Woodward, W. J. Kroll, and B. H. McCleod.

Bulletin 167. Archeological investigations at the mouth of the Amazon, by Betty J. Meggers and Clifford Evans.

Bulletin 168. The Native Brotherhoods: Modern intertribal organizations on the northwest coast, by Philip Drucker.

Bulletin 169. River Basin Surveys Papers, Nos. 9-14:

No. 9. Archeological investigations in the Heart Butte Reservoir area, North Dakota, by Paul L. Cooper.

No. 10. Archeological investigations at the Tuttle Creek Dam, Kansas, by Robert B. Cumming, Jr.

No. 11. The Spain site (39LM301), a winter village in Fort Randall Reservoir, South Dakota, by Carlyle S. Smith and Roger T. Grange, Jr.

No. 12. The Wilbanks site (9CK-5), Georgia, by William H. Sears.

No. 13. Historic sites in and around the Jim Woodruff Reservoir area, Florida-Georgia, by Mark F. Boyd.

No. 14. Six sites near the Chattahoochee River in the Jim Woodruff Reservoir area, Florida, by Ripley P. Bullen.

Bulletin 170. Excavations at La Venta, Tabasco, 1955, by Philip Drucker, Robert F. Heizer, and Robert J. Squier. With appendixes by Jonas E. Gullberg, Garniss H. Curtis, and A. Starker Leopold.

Publications distributed totaled 28,558 as compared with 17,018 for the fiscal year 1956.

COLLECTIONS

Acc. No.

214119. 3 cedar-bark mats from Nootka Indians, British Columbia, Canada.
 214961. 27 miscellaneous archeological specimens from Tennessee and Illinois collected by J. W. Emmert and G. Fowke before 1894.
 205014. 15 land snails from Ecuador and 33 ethnological specimens from Ecuador and Florida (through Dr. M. W. Stirling).
 205360. John W. Powell catalog of Indian collections deposited in the Smithsonian Institution, and supplement to catalog.
 207445. 13 specimens associated with Zuni Indian religious cult practices.

FROM RIVER BASIN SURVEYS

212741. 2 fresh-water mussels from Iowa (through Robert L. Stephenson).
 211157. Archeological material from 4 Nebraska counties, 1955.
 211158. Archeological material from 2 sites in Oahe Reservoir, Stanley County, S. Dak., and human skeletal material, 1955.
 213526. Archeological material from Rock Village, Mercer County, N. Dak., 1950-52.

Acc. No.

213765. 9 specimens of archeological material from Pembina River Reservoir, N. Dak., 1948.

214031. 1,332 specimens of archeological material from Fort Randall area, Gregory and Lyman Counties, S. Dak., 1950-52.

214234. Archeological material from Garrison Reservoir, McLean County, N. Dak., 1952.

214612. Archeological material from Fort Randall Reservoir, Lyman County, S. Dak., 1950.

MISCELLANEOUS

Dr. John R. Swanton, Dr. John P. Harrington, Dr. A. J. Waring, Jr., and Ralph S. Solecki continued as research associates of the Bureau of American Ethnology.

Dr. Frances Densmore, who had been a collaborator of the Bureau for a period of 50 years, died June 5, 1957, at her home in Red Wing, Minn., at the age of 90. Shortly before her death she corrected the proof of her last bulletin for the Bureau entitled "Music of Acoma, Isleta, Cochiti, and Zuñi Pueblos," which will be distributed in August 1957. Thirteen of her papers on Indian music were published by the Bureau as complete bulletins, five as anthropological papers, and one was published in the Annual Report series.

Information was furnished during the past year by staff members in reply to numerous inquiries concerning the American Indians, past and present, of both continents. Twelve bibliographies or information leaflets were prepared and duplicated for distribution to the public, as follows:

SIL-16, rev. Indian Crafts and Indian Lore. Bibliography.

SIL-50. Selected List of Portraits of Prominent Indians.

SIL-65, rev. Bibliography on the American Indians.

SIL-76. Statement regarding the Book of Mormon.

SIL-79. Indian Songs and Dances. Bibliography.

SIL-81. Selected Bibliography on Stone-chipping Methods.

SIL-89. Selected References on the Plains Indians.

SIL-92. Origin of the American Indian.

SIL-93. Trails and Trade Routes.

SIL-96. Photographic Collections pertaining to the American Indians.

SIL-98. Selected References on the Seminole Indians.

SIL-99. American Indian Medicine. Bibliography.

Many new descriptive lists and information leaflets were prepared in answer to requests for information on the Bureau's photographic and manuscript collections. There continued to be a popular demand for information, published material, and photographs from teachers—particularly of primary and secondary grades—from Scout and other civic organizations, and from the general public. Information and reference material for term papers were constantly requested by hundreds of high school and college students. Staff mem-

bers and the archivist were frequently consulted by publishers regarding the progress made in the various fields of anthropology and on specific projects for background material to be used in scientific and popular magazines and books, appropriate pictures and illustrations. Many specimens were identified for owners and data supplied to them.

Respectfully submitted.

M. W. STIRLING,

Director, Bureau of American Ethnology.

Dr. LEONARD CARMICHAEL,

Secretary, Smithsonian Institution.



Seventy-fifth Annual Report

of the

BUREAU OF AMERICAN ETHNOLOGY

1957-1958



SMITHSONIAN INSTITUTION

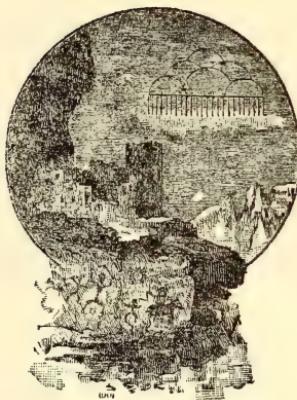
WASHINGTON

D. C.



SEVENTY-FIFTH
ANNUAL REPORT OF THE
BUREAU OF
AMERICAN ETHNOLOGY
TO THE SECRETARY OF THE
SMITHSONIAN INSTITUTION

1957-1958



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BUREAU OF AMERICAN ETHNOLOGY

June 30, 1958

Director.—FRANK H. H. ROBERTS, Jr.

Anthropologists.—HENRY B. COLLINS, WILLIAM C. STURTEVANT.

Research Associates.—JOHN P. HARRINGTON, MATTHEW W. STIRLING, A. J. WARING, Jr.

Archivist.—MARGARET C. BLAKER.

Scientific Illustrator.—E. G. SCHUMACHER.

Administrative Assistant.—JESSIE S. SHAW.

RIVER BASIN SURVEYS

Director.—FRANK H. H. ROBERTS, Jr.

Chief, Missouri Basin Project.—ROBERT L. STEPHENSON.

Archeologists.—WARREN W. CALDWELL, JAMES J. F. DEETZ, BERNARD GOLDEN, HAROLD A. HUSCHER, WILLIAM N. IRVING, CHARLES H. McNUTT, CARL F. MILLER, ROBERT W. NEUMAN, G. HUBERT SMITH, RICHARD P. WHEELER.

Field Assistant in Geology.—ALAN H. COOGAN.

Physical Anthropologist.—WILLIAM M. BASS III.

SEVENTY-FIFTH ANNUAL REPORT
OF THE
BUREAU OF AMERICAN ETHNOLOGY

FRANK H. H. ROBERTS, Jr., *Director*

SIR: I have the honor to submit the following report on the field researches, office work, and other operations of the Bureau of American Ethnology during the fiscal year ended June 30, 1958, conducted in accordance with the act of Congress of April 10, 1928, as amended August 22, 1949, which directs the Bureau "to continue independently or in cooperation anthropological researches among the American Indians and the natives of lands under the jurisdiction or protection of the United States and the excavation and preservation of archeologic remains."

SYSTEMATIC RESEARCHES

(Prepared from data submitted by staff members.)

Dr. M. W. Stirling, Chief of the Bureau of American Ethnology from 1928 to 1947 and Director since 1947, retired on December 31, 1957. At that time he was appointed a research associate. During the period from July 1 to December 31, 1957, Dr. Stirling devoted most of his time to administrative duties and the preparation of a manuscript pertaining to previous fieldwork in Panama and Ecuador. Executive January 1, 1958, Dr. Frank H. H. Roberts, Jr., Associate Director, was appointed Director. He also continued to be in charge of the River Basin Surveys.

During the fiscal year Dr. Roberts devoted most of his time to the management of the River Basin Surveys and subsequently to the duties of the main Bureau office. In July and early August he made an inspection trip to the Missouri Basin where he visited all the excavation parties of the River Basin Surveys and also several of those from cooperating institutions. He was accompanied by Dr. Robert L. Stephenson, chief of the Missouri Basin Project, Dr. John M. Corbett, National Park Service archeologist, and Paul L. Beaubien, regional archeologist for Region Two of the Service. Late in April Dr. Roberts went to the field headquarters at Lincoln, Nebr., to assist in preparing plans for the field season in the Missouri Basin. From Lincoln, in company with several members of the Missouri Basin Project staff, he went to Norman, Okla., to attend and participate in the annual meeting of the Society for American Archeology. From here the group proceeded to Russellville, Ark., where it inspected the

excavations being carried on by a River Basin Surveys party in the Dardanelle Reservoir area. En route back to Lincoln a stop was made at the University of Arkansas at Fayetteville, and a number of collections of archeological material in the museum there were examined. After spending several additional days at Lincoln studying the operations of the office and laboratory, Dr. Roberts returned to Washington and was in the office at the close of the year. During the fall and winter months Dr. Roberts reviewed and suggested changes in the manuscripts of several detailed, technical reports on the results of excavations at sites in the Missouri Basin and other areas.

Dr. Henry B. Collins, anthropologist, continued his Eskimo studies and other Arctic activities. He prepared an article on Eskimo art for the *Enciclopedia Universale Dell'Arte*, a 14-volume work to be published in Italian and English by the Istituto per la Collaborazione Culturale, Rome. His paper "Present Status of the Dorset Problem," which he presented at the 32d International Congress of Americanists in Copenhagen, was published in the Proceedings of the Congress.

In May Dr. Collins participated in an international conference on Arctic anthropology held at the Danish National Museum in Copenhagen. Also attending were five anthropologists from the United States, one from Canada, four each from Denmark and the U. S. S. R., and two each from Norway, Sweden, and Finland. The purpose of the meeting was to discuss plans for closer international cooperation in Arctic anthropology. Following the conference Dr. Collins visited a large Mesolithic site, Kongemosen, representing the formative stage of the Ertebölle culture, and two other Mesolithic sites at Eriksholm and Langtved, near Holbaek.

Dr. Collins continued to serve on the publications and research committees of the Arctic Institute of North America, as well as on the committee which plans the research program of the Arctic Research Laboratory at Point Barrow, operated by the Office of Naval Research. He also continued as chairman of the Directing Committee which plans and supervises the work of the *Arctic Bibliography*, a comprehensive annotated and indexed bibliography of publications in all fields of science relating to the Arctic and sub-Arctic regions of America and Eurasia. The work is being prepared by the Arctic Institute of North America for the Department of Defense. Volume 8 of the Bibliography, which abstracts and indexes the contents of 5,623 publications in English, Russian, German, and the Scandinavian and 17 other languages, was delivered to the Government Printing Office in June. This makes a total of 49,087 publications that have been abstracted thus far in *Arctic Bibliography*.

Dr. William C. Sturtevant, ethnologist, spent the week of July 29-August 4, 1957, in South Carolina working with the last living speaker of any of the Siouan languages of the east—a Catawba man 85 years old. The informant proved somewhat less than satisfactory, owing to his age and rather poor recall of a language he has not spoken for some years. However, a vocabulary file of a few hundred entries was built up, and several short texts and songs were collected. In addition to transcription in a phonetic orthography, all materials were recorded with a tape recorder, to form a permanent record of a different nature than the Catawba linguistic materials collected by others before the advent of convenient mechanical recording devices with good fidelity. The language has not yet been adequately analyzed, nor has its precise relationship to other Siouan languages been established; the tape recording will be invaluable when these tasks are eventually undertaken.

Dr. Sturtevant spent 7 weeks continuing his field research among the New York State Seneca, during four separate trips. In September he devoted 10 days to close observation of the work of a skilled Seneca mask carver on the Allegany Reservation, making detailed notes on his construction techniques and taking numerous photographs to document the various steps in the process. For a few days of this period Dr. Sturtevant received valuable assistance from Dr. William H. Davenport of Yale University, a specialist on primitive art. It became evident during this fieldwork that observation of construction is an essential preliminary to the structural analysis of the forms of these Seneca masks and will be of considerable assistance in the ethnoesthetic study initiated during the previous fiscal year. During January and February, Dr. Sturtevant spent about 2 weeks on the Cattaraugus Reservation attending the annual midwinter ceremony of this Seneca group and discussing it with participants. The data obtained form part of a continuing study of the religion of this community, which has previously received little attention from ethnologists, in contrast to most other Iroquois non-Christian communities.

In April 1958, Dr. Sturtevant visited Gainesville, Fla., for consultations on Florida anthropology with Dr. John M. Goggin. From there he traveled to Oklahoma via Montgomery, Ala. (where he examined the collections of the Alabama Department of Archives and History), and the region around Philadelphia, Miss. (where he spent three days surveying the possibilities for research among the Mississippi Choctaw). In Oklahoma he examined the photograph and specimen collections of the Oklahoma Historical Society, attended the joint annual meetings of the Society for American Archeology and the Central States Anthropological Society, and had brief contacts with members of several Oklahoma tribes. Dr. Sturtevant also

attended the 11th Conference on Iroquois Research at Red House, N. Y., in October 1957. At these latter two professional meetings he delivered three papers. In December 1957 he attended the American Anthropological Association meetings in Chicago (where he also examined an important collection of Seminole artifacts and a large newly discovered collection of early photographs of the Seminole).

In May and June 1958, Dr. Sturtevant returned for three weeks to the Allegany Reservation, where he concentrated on study of social organization, particularly residence patterns. These data should prove valuable for comparison with similar information, as yet unpublished, collected some 25 years ago on this reservation by Dr. William N. Fenton. Furthermore, the community studied is threatened with removal to make way for flooding of a large part of the reservation by the proposed Kinzua dam. If the dam is built, present residence patterns can then be compared with residence after relocation of the community. The nearly unanimous opposition of the Indians to relocation makes research of this sort rather difficult.

Dr. Sturtevant's office work included continuation of his research on the Florida Seminole, on which a paper was published in Publication No. 5 of the Florida Anthropological Society, and work on a paper on the historical ethnobotany of the cycad *Zamia*.

At the beginning of the fiscal year Carl F. Miller was continuing the excavations by the Smithsonian Institution-National Geographic Society Expedition at Russell Cave in Alabama. The work continued until the end of August, and during that period a section of the cave floor was excavated to a depth of 32 feet, where a water table was encountered and it was necessary to stop the digging. During the course of the work the skeletal remains of a very young infant were found at a depth of approximately 4 feet. On the basis of a carbon-14 date obtained during the previous season's investigations at the cave, it is estimated that the burial was approximately 5,000 years old. There were no accompanying mortuary offerings, but the deposits where the remains were interred indicated that the Early Woodland Period was represented. The partially flexed remains of an adult male were found 8½ feet below the floor level and it also lacked any accompanying offerings. The burial probably was made about 7,000 years ago. The material from the deposits indicates that potterymaking began in that area at about 3500 B. C. Prior to that time the people apparently had a completely hunting-fishing economy. A large series of implements, discarded animal bones, and other materials was obtained from the lower deposits, and at a depth of 23 feet the remains of a hearth were uncovered. Charcoal from that hearth was recently dated by Dr. H. R. Crane at the University of Michigan as being $9,020 \pm 350$ years old. The Russell Cave Expedi-

tion brought back to the Smithsonian Institution somewhat more than a ton and a half of material for study and exhibit purposes.

RIVER BASIN SURVEYS

The River Basin Surveys, in cooperation with the National Park Service and the Bureau of Reclamation of the Department of the Interior, the Corps of Engineers of the Department of the Army, and various State and local institutions, continued its program for salvage archeology in areas to be flooded or otherwise destroyed by the construction of large dams. During the fiscal year 1957-58 the program was financed by a transfer of \$175,624 from the National Park Service to the Smithsonian Institution. Of that amount \$157,624 was for use in the Missouri Basin and the remainder covered operations in other areas. A carryover of \$15,902 from the Missouri Basin funds for the preceding fiscal year made the total available for the Missouri Basin \$173,526. The over-all total for the year was \$191,526. The amount of available money was somewhat larger than during the previous fiscal year, and the increase was reflected in the work accomplished.

Field investigation during the year consisted mainly of excavations, although some surveys were carried on in several areas. On June 1, 1957, nine parties were in the field. Four were doing intensive digging in the Great Bend Reservoir area and four were making excavations in the Oahe Reservoir area, both projects being located in South Dakota. A survey party covered portions of the Big Bend area, which had not been visited during the previous summer's work, and carried on test operations in 14 sites. In September that party moved to the Oahe Reservoir basin where it started similar operations. Most of the field parties had returned to their headquarters by the end of September. Early in the spring a party conducted excavations in the Dardanelle Reservoir area on the Arkansas River in Arkansas. During the period February-June, a survey party worked in three reservoir areas along the lower Chattahoochee River in Alabama and Georgia, and in April-June another party excavated in two sites in the Hartwell Reservoir area in South Carolina-Georgia. At the end of the fiscal year nine parties were conducting excavations along the Missouri River in South Dakota. Five were working in the Great Bend Reservoir area and four in the Oahe Reservoir Basin.

By June 30, 1958, reservoir areas where archeological surveys and excavations had been made since the salvage program got under way in 1946 totaled 254 in 29 States. The survey parties have located and recorded 4,889 archeological sites, and of that number 997 have been recommended for excavation or limited testing. In general

the term "excavation" does not indicate the complete investigation of a site, but usually means that only about 10 percent of it has been uncovered. There are some cases, however, where the locality is of sufficient significance to warrant extensive digging. Preliminary appraisal reports have been issued for all the reservoir areas surveyed, with the exception of the Big Bend in South Dakota and the group of three in Chattahoochee Basin. The report for the Big Bend has been completed, however, and will be processed early in the coming fiscal year. One preliminary report covering the survey of the Dardanelle Reservoir area in Arkansas was mimeographed and distributed during the year. Since the beginning of the Inter-Agency Archeological Salvage Program, 184 appraisal reports have been issued. The discrepancy between that number and the total of the reservoir areas examined is due to the fact that in several cases information obtained from a number of reservoir projects located in a single basin or subbasin have been combined in a single report.

By the end of the fiscal year 388 sites in 52 reservoir basins located in 19 different States had been either partially or extensively dug. Only a single site was excavated in some of the reservoir areas, while in others a whole series was investigated. At least one example of each type of site recommended by the preliminary surveys had been excavated. In some cases it has been necessary to dig a number of somewhat similar sites because the complexity of such remains makes it essential to have considerable comparative material in order to obtain full information about that particular phase of aboriginal culture. In brief it may be said that the cultural stages represented cover the range from the early hunting peoples of about 10,000 years ago to the frontier trading and Army posts of the latter part of the 19th century. Reports of the results obtained from some of the excavations have been published in Bulletins of the Bureau of American Ethnology, in the Smithsonian Miscellaneous Collections, and in various scientific journals. During the year River Basin Surveys Paper No. 8, Bulletin 166 of the Bureau of American Ethnology, was distributed. It was written by Dr. Douglas Osborne and pertains to excavations in the McNary Reservoir Basin near Umatilla, Oreg. Accompanying the archeological report are appendices on the skeletal material, trade goods, and composition of the copper objects found during the excavations. River Basin Surveys Papers 9-14, which will constitute Bulletin 169 of the Bureau of American Ethnology, were in page proof at the end of the year, and the volume should be ready for distribution early in the next fiscal year. Three of the papers pertain to investigations in the Missouri Basin, two to work done in the Jim Woodruff Reservoir area, Georgia-Florida, and one to a site in the Alatoona Reservoir

area in Georgia. Twelve detailed technical reports on the results of work done during previous years were completed during 1957-58 and are ready to submit to the editors for publication as soon as funds sufficient to cover their cost are available.

As of June 30, 1958, the distribution of reservoir projects that have been surveyed for archeological remains was as follows: Alabama, 3; Arkansas, 1; California, 20; Colorado, 24; Georgia, 8; Idaho, 11; Illinois, 2; Iowa, 3; Kansas, 10; Kentucky, 2; Louisiana, 2; Minnesota, 1; Mississippi, 1; Montana, 15; Nebraska, 28; New Mexico, 1; North Dakota, 13; Ohio, 2; Oklahoma, 7; Oregon, 27; Pennsylvania, 2; South Carolina, 1; South Dakota, 10; Tennessee, 4; Texas, 19; Virginia, 2; Washington, 11; West Virginia, 2; Wyoming, 22. Excavations have been made or were under way in reservoir basins in Arkansas, 1; California, 5; Colorado, 1; Iowa, 1; Georgia, 5; Kansas, 5; Montana, 1; Nebraska, 1; New Mexico, 1; North Dakota, 4; Oklahoma, 2; Oregon, 4; South Carolina, 2; South Dakota, 4; Texas, 7; Virginia, 1; Washington, 4; West Virginia, 1; Wyoming, 2. The preceding figures include only the work of the River Basin Surveys or that which was in direct cooperation between local institutions and the Surveys. The investigations made by State and local institutions working under agreements with the National Park Service have not been included because complete information about them is not available.

The River Basin Surveys, as in previous years, received helpful cooperation from the National Park Service, the Bureau of Reclamation, and the Corps of Engineers, and various State and local institutions. The Corps of Engineers provided transportation and guides for work in one of the reservoir areas and provided temporary field headquarters for a party in another area. In several instances mechanical equipment to assist in heavy excavations was made available by the construction agency. Field personnel of all the agencies was particularly helpful to the various party leaders from the River Basin Surveys and expedited their activities in numerous ways. The National Park Service continued to serve as the liaison between the various agencies, both in Washington and in the field. The Park Service also prepared the estimates and justifications for the funds needed to carry on the salvage program. In the several Park Service regions the regional directors and members of their staffs cooperated wholeheartedly in the program and greatly aided all phases of the operations.

The main office in Washington continued general supervision of the program. The field headquarters and laboratory at Lincoln, Nebr., was responsible for the activities in the Missouri Basin and also provided a base of operations for the party which worked at the

Dardanelle Reservation in Arkansas. The materials collected by the excavating parties in the Missouri River Basin, as well as the one in Arkansas and those from the Toronto Reservoir area on the Verdigris River in Kansas, which were obtained the previous year, were processed at the Lincoln laboratory. During the first two months of the fiscal year, Dr. James H. Howard, who supervised the project at the Kansas Reservoir, worked in the Lincoln office studying the specimens which he had recovered and preparing his report.

Washington office.—The main headquarters of the River Basin Surveys at the Bureau of American Ethnology continued under the direction of Dr. Frank H. H. Roberts, Jr. Carl F. Miller, archeologist, was detailed to the regular Bureau staff for the period from July 1 to December 29, in order to continue excavations at Russell Cave, Alabama, and to work up the material obtained from the cave. On December 30 he returned to the River Basin Surveys staff and from then until April 22 devoted his time to the completion of his report on previous excavations at the James H. Kerr (Buggs Island) Reservoir on the Roanoke River in southern Virginia. During the winter months he spoke before several local societies, completed an article on the Russell Cave work for the National Geographic Magazine and gave a lecture on the cave before the National Geographic Society in Washington. On April 22 he proceeded to South Carolina where he conducted excavations in the Hartwell Reservoir area. While engaged in those investigations he spoke before several local Rotary and Lions Clubs, several groups of Boy Scouts, and a Naval Research group at Clemson College. On May 23 he participated in a conference held at the University of Georgia at Athens, at which time representatives of the National Park Service, the University of Georgia, and the River Basin Surveys discussed future work for the Hartwell Reservoir area. Mr. Miller returned to Washington on June 26 and on June 29 was again transferred to the Bureau of American Ethnology to resume the activities at Russell Cave. The latter work, which is a cooperative project between the Smithsonian Institution and the National Geographic Society, was to continue through the early months of the following fiscal year.

William M. Bass III, temporary physical anthropologist, was on duty in Washington at the beginning of the year. He devoted the month of July and the first week in August to a study of human skeletal material from various sites in the Missouri Basin and prepared reports on his findings. On August 9 he left Washington for Pierre, S. Dak., and spent the ensuing 3 weeks assisting in the removal of Indian burials at the Sully site in the Oahe Reservoir area. Mr. Bass returned to Washington August 29 and resigned from the Surveys in order to resume his studies toward an advanced degree. On

June 2 Mr. Bass again reported for duty in Washington and spent 3 weeks classifying human skeletal material from the James H. Kerr Reservoir in southern Virginia. He then proceeded to Pierre, S. Dak., and took charge of a party conducting excavations in the burial area at the Sully site. Mr. Bass was engaged in those activities at the close of the year.

Harold A. Huscher, archeologist on the staff of the Missouri Basin Project, was detailed to the Washington office beginning February 2, 1958, and on February 7 left for Georgia and Alabama, where he carried on preliminary surveys in three reservoir areas in the lower Chattahoochee River Basin. Mr. Huscher continued those activities until June 23 when he went to Athens, Ga., to participate in the conference at which Mr. Miller was also in attendance. Following the conference Mr. Huscher returned to Washington, and at the close of the fiscal year was preparing a summary report on the results of his explorations along the Chattahoochee.

Alabama-Georgia.—During the period February 10 to June 21 preliminary surveys were made in the areas to be flooded by the Columbia Dam and Lock, the Walter F. George Dam and Lock, and the Oliver Dam on the lower Chattahoochee River. The Columbia Dam and Lock and the Walter F. George Dam and Lock are projects of the Corps of Engineers, Department of the Army, while the Oliver Dam is being constructed by the Georgia Power Co. The Columbia Dam is to be located a short distance below the bridge across the Chattahoochee River at Columbia, Ala. The Walter F. George Dam is to be built at Fort Gaines, Ga., and the Oliver Dam is located a short distance above Columbus, Ga. These three projects together will flood out 120 contiguous miles of the Chattahoochee bottoms. Since the area to be affected by the Walter F. George project will be the first to be inundated, most of the period was spent in that area, although some reconnaissance was made in both of the other basins.

During the course of the survey in the Walter F. George basin, 117 archeological sites were located and recorded on the Georgia side of the river and 90 sites on the Alabama side. They range from simple village locations to areas containing the remains of several different cultures, and from single to multiple mound groups. In addition there are two historical sites of considerable importance. One is that of the Spanish Fort of Apalachicola, dating from 1689 to 1691, and the other the historic Creek town of Roanoke which was occupied by the whites and then attacked and burned by the Indians in 1736. Because the exact dates of occupancy of the Fort are known, it should provide an important check point in working out the chronology of the area. Also, since the Roanoke village was burned it should be quite productive archeologically. The aboriginal sites range from Early

Woodland to relatively late Creek villages dating from the period 1675-1836. The latter present the possibility of a specific identification of sites from ethnohistorical evidence, as well as an unusual opportunity to use the direct-historical approach in establishing a regional chronology.

The manifestations in the Columbia Dam and Lock and Oliver Dam basins are an integral part of the entire picture in the Lower Chattahoochee Valley and must be studied in conjunction with those in the Walter F. George section. Complete coverage of those two projects was not possible in the time devoted to the reconnaissance, but it was determined that there are at least 14 sites in the immediate area of the Columbia Dam which will be affected by construction activities. One is a major mound site probably dating about A. D. 1200, already half destroyed by the river, which calls for immediate investigation. Three others are major village sites attributable to the Weeden Island cultural pattern. In the Oliver Dam district there are at least 15 known sites including mounds, early village locations, and caves giving evidence of Indian occupation. The series encompasses a period of at least 3,000 years.

The entire history of aboriginal development in that portion of the Chattahoochee Valley is contained in the river bottoms and low terraces which will be flooded by the three reservoirs. Very little archeological work has been done there and an extensive program of excavation is indicated. In addition, further surveys should be made in districts not covered during the recent investigations.

Arkansas.—In the Dardanelle Reservoir Basin on the Arkansas River in west-central Arkansas, excavations were made in five sites, and two new sites were located and recorded during the period from March 18 to May 7. All seven of the sites involved were in the lower portion of the reservoir area. One rock shelter was almost completely excavated and four open sites were extensively tested. Little was found at the excavated sites to indicate the type of dwelling or structures erected by the people. However, a considerable collection of artifact material was recovered which shows that the sites primarily represent the Archaic Period and that their ceramics were related to the Lower Mississippi Valley sequences. Only slight influences were noted from the Caddoan area to the west and southwest. The two new sites found by the field party represent a mound-village complex and a historic Cherokee location. Because of adverse weather and unusually heavy rains during the period the party was in the Dardanelle area, not so much work was accomplished as had been contemplated, and it was recommended that similar excavations be made during the following fiscal year in upper portions of the reservoir basin.

The proposed survey of the Greer's Ferry Reservoir area, which was postponed the previous year because of high waters, was not made during the current year by a River Basin Surveys party as contemplated. Instead the University of Arkansas, working under an agreement with the National Park Service, carried out the preliminary investigations at Greer's Ferry. The situation there was somewhat comparable to that in the Dardanelle area in that weather conditions hampered the work to a considerable degree. It was planned that another party from the University would return to the Greer's Ferry area shortly after the beginning of the new fiscal year.

Iowa.—No fieldwork was carried on in Iowa during the fiscal year ended June 30, 1958. However, the detailed technical report "Archeological Salvage Investigations in the Coralville Reservoir, Iowa" was completed during the year and will be available for publication as soon as funds for that purpose are available. The report consists of 100 typed pages, 12 plates, and 15 text figures.

Kansas.—The only activity on the part of the River Basin Surveys during the fiscal year pertaining to Kansas was that of the completion of the detailed technical report on the excavation in eight sites in the Toronto Reservoir Basin during the spring months of 1957. A typed manuscript of 90 pages with 12 plates and 15 text figures is now ready to submit to the editors.

Missouri Basin.—As in previous years, the Missouri Basin Project continued to operate from the field headquarters and laboratory at 1517 "O" Street, Lincoln, Nebr. Dr. Robert L. Stephenson served as chief of the Project throughout the year. Activities included work on all four phases of the salvage program: (1) Survey, (2) excavation, (3) analysis, and (4) reporting. The first two phases received major attention in the summer months, and the second two during the fall and winter. In addition to the four regular phases of the program, a special chronology program was initiated during the year.

At the beginning of the fiscal year the staff, in addition to the chief, consisted of 4 permanent archeologists, 1 archeologist detailed to the Project from the Washington office, 5 temporary field assistants, 1 field assistant detailed to the project from the Washington office, 1 temporary physical anthropologist on duty in the Washington office, 1 field and laboratory assistant, 1 administrative assistant, 1 museum aide, 1 clerk-stenographer, 1 file clerk (half time), 1 photographer, 1 clerk-typist, 2 temporary laboratory assistants, 1 temporary (part time) draftsman, and 79 temporary field crewmen. At the end of the 1957 summer field season, all temporary field crewmen were terminated, with the exception of one who was assigned laboratory assistant's duties in the Lincoln office. The physical anthropologist subsequently was on duty in the Missouri Basin for 3

weeks in August. The archeologist and field assistant detailed from the Washington office returned to their regular assignments in August. Two temporary field assistants were terminated in August. Two other temporary field assistants were appointed as archeologists on the permanent staff. One temporary field assistant was transferred to duty outside the Missouri Basin in January. One illustrator was added to the permanent staff in November. All other temporary employees were terminated in December and January. Four museum aides were added to the permanent staff during the year. One temporary archeologist and two temporary field assistants were added at the beginning of the 1958 field season. At the end of the fiscal year there were 6 archeologists in addition to the chief, 1 administrative assistant, 1 clerk-stenographer, 1 file clerk (three-quarters time), 1 clerk-typist, 1 photographer, 1 illustrator, and 4 museum aides on the permanent staff. Temporary employees included 1 archeologist, 1 physical anthropologist, 2 field assistants, 3 cooks, and 90 crewmen.

During the year there were 19 Smithsonian Institution River Basin Surveys field parties at work within the Missouri Basin, while another, working outside the Basin, also operated from the Project office in Lincoln. Of the 19 Missouri Basin parties, 5 were at work in July, August, and September in the Big Bend Reservoir area in South Dakota, and 5 additional parties were at work there in June. Five parties worked in the Oahe Reservoir area in July, August, and September, and four other parties were at work there in June. The party outside the Missouri Basin was that in the Dardanelle Reservoir area in Arkansas.

Other fieldwork in the Missouri Basin during the year included 11 field parties from State institutions working under agreements with the National Park Service and in cooperation with the salvage research program of the Smithsonian Institution. Parties from the Universities of South Dakota, Idaho, Wyoming, Kansas, and Missouri and from the North Dakota State Historical Society were in the field during July to October. Parties from the Universities of South Dakota, Idaho, Wyoming, and Missouri were conducting excavations in June, as was a joint party from the North Dakota State Historical Society and the University of North Dakota.

At the beginning of the year in the Big Bend Reservoir area, G. Hubert Smith and a party of 10 were engaged in excavations on the right bank of the Missouri River near the mouth of Medicine Creek, in Lyman County, S. Dak., at site 39LM241. This site was believed to be that of Fort Defiance (or Bouis), a small, short-lived trading post of the 1840's. It was one of a number of such establishments organized from time to time in competition with the American Fur Co. (P. Chouteau, Jr., & Co., after 1834). It was hoped that

work there would provide information on such lesser establishments of the fur and Indian trade, of which little was ever recorded at the time they were in use. Excavations at 39LM241 proved that it was not the site of Fort Defiance (or Bouis) but that it was of a later period of permanent settlement, dating after 1880. Further search for the Fort Defiance site proved fruitless. While somewhat scanty, the data and specimens from 39LM241 provide materials that should be very useful for comparative studies relating to this later period of white occupation. The Smith party completed 6 weeks of fieldwork and returned to the Lincoln office early in August.

The second River Basin Surveys field party in the Big Bend Reservoir area at the beginning of the year was directed by Dr. Warren W. Caldwell and consisted of a crew of nine. The group was at work on the right bank of the Missouri River in Lyman County, S. Dak., some 7 miles above the Lower Brule Agency, excavating in the Black Partizan site (39LM218). The latter consists of the remains of a prehistoric earth-lodge village of at least 2 component occupations and perhaps 3. The party completely excavated 1 circular earth-lodge ruin and a large portion of a second, cross-sectioned a defensive fortification ditch, excavated 1 complete bastion of the stockade, and tested a number of midden areas and cache pits. The circular houses were situated well outside the fortification ditch and were of the late occupation of about the end of the 17th century. The ditch and bastion represent two earlier occupation periods, with the ditch being dug during the earlier one, later filled in and, still later, redug. Tests indicated a rectangular house inside the fortification ditch and, together with midden areas and cache pits in that area, provided both simple-stamped and cord-roughened pottery that predates the material recovered from the circular houses outside the stockade. Among the finds made in the cache pits, one of particular interest was the burial of two very large, adult dogs, together with a pup. After 12 weeks of excavation, the party disbanded and returned to the Lincoln office on September 7. The Caldwell and Smith parties shared a joint field camp near the mouth of Medicine Creek.

The third River Basin Surveys field party in the Big Bend Reservoir area at the beginning of the year was under the direction of Robert W. Neuman and had a crew of 10. That party conducted excavations in four sites in the vicinity of Old Fort Thompson, the Indian Agency, on the left bank of the Missouri River in Buffalo County, S. Dak. Two of them were prehistoric village sites on the low terrace bottoms, and two were burial mounds situated on the higher terrace of the Missouri River. The Pretty Bull site (39BF12) was found to have had three separate occupations. The earliest and deepest remains were recovered from two test excavations that un-

covered two basin-shaped pits with burned, bright orange-colored walls. One of these pits was associated with a few scattered post molds. The recovered artifacts suggest a Middle Woodland occupation and include cord-marked pottery, crude triangular projectile points, stone end scrapers, elk or deer bone and antler tools, small shell disk beads, and concentrations of hematite. The middle occupation was apparent in a large strata trench, where six cache pits with slightly convex bottoms and undercut walls were excavated. Fill within the pits included an abundance of Monroe, Anderson, and Foreman pottery that relates to an early, rectangular-house occupation. Bone and stone implements were also numerous, but no architectural features were found. The late occupation was represented in the excavations by the remains of a large, circular earth lodge. A central fire hearth, basin- and bell-shaped cache pits, and secondary fire hearths were excavated within the house. The ceramic collections from the house fill consist of at least nine pottery types, suggesting a long and varied occupation. The post-mold pattern of the house was poorly defined in some places, but the general pattern was unmistakable.

The second village location excavated by the Neuman party was the Akichita site (39BF221). There, three midden areas were sampled extensively, and an abundance of artifacts and refuse was recovered, but no houses were located. One bell-shaped cache pit was dug. Artifacts collected suggest close affiliation with the older levels at the Dodd site (39ST30) near Pierre, S. Dak. It was felt at the end of the season that additional work was needed there, particularly an effort to determine the architectural pattern of the houses. A third site excavated was the Olson Mound (39BF223). It was a low, circular earth mound 1.5 feet high and 40 feet in diameter. No pottery and very few bone or stone artifacts were recovered from the fill. In the center, and on the base of the mound, there was a concentration of badly decomposed human bones, suggesting the secondary burial of an undetermined number of individuals. The cultural affiliation of the complex has not yet been determined. The final site excavations by the Neuman party were at the Truman Mound site (39BF224). The latter consisted of a group of four low, circular mounds in a line along the terrace edge, each measuring about 2 feet in height and 50 feet in diameter. Three of the mounds contained primary and/or secondary burials. One mound contained a deep, oval pit extending 6 feet below its top surface. A flexed burial, shell pendants, pottery sherds, and bone and shell tools were recovered from both the pit and the mound fill. Another of the mounds had a rectangular design of small rocks on its top surface and contained secondary burials. One skull displayed a large cut hole in the left



1. Excavating a dwelling site of the period of permanent White settlement in the Big Bend Reservoir area, South Dakota. River Basin Surveys.



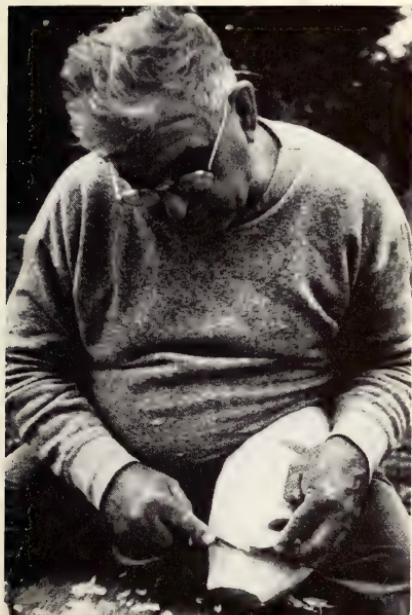
2. Cutting trench through large burial mound at the Olson site, Big Bend Reservoir area, South Dakota. River Basin Surveys.



1. Floor of large circular earth lodge dating about the 17th century. Holes around periphery indicate location of wall poles; four larger holes in floor area show position of main supports. Entrance passage at rear with the Missouri River in background. Oahe Reservoir area, South Dakota. River Basin Surveys.



2. Excavating house floor and cache pits at the Sully site, Oahe Reservoir area, South Dakota. River Basin Surveys.



Four stages in the carving of a Seneca mask. Allegany Reservation, New York.
September 1957.



2. Samuel Taylor Blue, last living speaker of the Catawba language, South Carolina. August 1957.



1. Bilk Williamson, Mississippi Choctaw, with drum used in stick-ball game. April 1958.

temporal region. This mound lacked pottery, but in all other respects resembled the other three excavated mounds. The pottery from this mound group, including one restored vessel, was simple stamped, but had a typical Middle Woodland conoidal vessel shape and no decoration. This party disbanded and returned to the Lincoln headquarters on October 3, after 14 weeks of fieldwork.

The fourth River Basin Surveys field party in the Big Bend Reservoir area was directed by William N. Irving and consisted of a crew of eight. At the beginning of the year the party was at work on the left bank of the Missouri River in the vicinity of Old Fort Thompson in Buffalo County, S. Dak. Efforts were concentrated on the Medicine Crow site (39BF2), and excavations were made in three separate areas. In area A the men uncovered a circular earth lodge and several cache pits of the late occupation of about the early 18th century. In area C another circular earth lodge and several cache pits were excavated, and the recovered material suggests an occupation date a few decades earlier than that of area A. One cache-pit burial was recovered there. The main work of the season was in area B, where a large series of extensive test excavations revealed deeply buried evidence of at least three separate occupations, antedating the appearance of ceramics in the area. Some 25 projectile points and a large collection of camp refuse were obtained. The types of the artifacts and the stratigraphic situation, terminating in a coarse sand at the bottom, suggest an early Archaic occupation of perhaps as much as 5,000 or more years ago. One skull, recovered from the site, compares physically with the "Minnesota Man" remains, which generally are believed to be late Pleistocene in age. This is the best early-period site thus far noted in the immediate valley of the Missouri River. It has a strong potential for producing evidence for a good sequence of occupations from very early preceramic times to late ceramic times. The geology of the terrace formations there, and pollen analyses, promise good interpretative possibilities. The party ended the season's work on October 3, after 14 weeks of excavation. The Neuman and Irving parties shared a joint camp at Old Fort Thompson.

The fifth River Basin Surveys field party in the Big Bend Reservoir area at the beginning of the fiscal year was directed by Harold A. Huscher. He was assisted by a crew of three. This was a mobile party and constituted an extension of the previous summer's survey work in that area. During the season's work the group conducted extensive test excavations in 14 sites on both sides of the river in Buffalo, Hyde, Hughes, Lyman, and Stanley Counties; made surface collections from 14 other sites in Buffalo and Hyde Counties; and located 16 previously unrecorded sites. Of the sites tested, 12 were

recommended for excavation and 2 were written off as meriting no further attention. The 12 comprised either single- or multi-occupation sites, ranging in time from Middle Woodland through the early ceramic periods of rectangular houses to and including the late ceramic periods of circular earth lodges. One suggests a preceramic horizon somewhat similar to that at the Medicine Crow site (39BF2). Of the sites visited and not tested, nine were recommended for further investigation, and five were written off. One of the latter five, 39HU215, was first thought to be an early 19th-century trading post, but tests indicated that it was a late 19th-century homestead allotment, probably of Dakota occupancy. On September 3 this party terminated its work in the Big Bend area after 8 weeks in the field, and moved to the Oahe Reservoir area to continue similar survey and testing activities.

In the Oahe Reservoir area there were four River Basin Survey parties in the field at the beginning of the fiscal year, and a fifth party began work there early in September. Dr. Robert L. Stephenson with a crew of 23 was excavating, at the beginning of the year, in the vicinity of Fort Sully on the left bank of the Missouri River in Sully County, S. Dak. That party conducted intensive excavations in the Sully site (39SL4), the remains of the largest of the prehistoric earth-lodge villages known in the Missouri Basin. It also completely excavated a small rock-cairn burial site (39SL38) nearby. The latter consisted of a deep burial beneath a rock pile and produced a skeleton in poor condition, with no associated artifacts. The Sully site excavations included 13 circular earth lodges of the nearly 400 presumed to be present in the site, and 1½ of the 4 ceremonial lodges. The house floors ranged in depth, below the surface, from 2 to 4 feet; entrances were to the southwest; and two distinct architectural patterns were observed. One was composed of closely set double rows of small outer wall posts, the other was composed of widely spaced single rows of large outer posts with leaner posts outside them. Apparently there were two closely related, yet somewhat different, occupational patterns, and the artifact inventory tends to support this distinction. The ceremonial lodges were 12-sided structures of 75- to 80-foot diameters and had long entrance passages. The other houses all had very short entrances. The ceramic inventory suggests that there may have been an earlier occupation featuring rectangular houses, but no such houses were found in the areas excavated. Other features excavated include burial areas where 63 burials were recovered, midden heaps, a large rectangular "plaza" area of unknown usage, a large I-shaped depression of unknown usage, a strata trench across the center of the site, and 91 cache pits. The major occupation of the site appears to have been by the immediate ancestors of the

Arikara during the period 1600-1750. The other occupation or occupations were somewhat earlier. Among the unusual materials recovered were several catlinite pipes, an ornament of turquoise, a piece of obsidian, and several ornaments made from marine shells. The burials will provide a good series for study, and the field party was particularly fortunate to have William M. Bass III, physical anthropologist of the River Basin Surveys staff, present to assist in the excavation of the burial areas. This party returned to the Lincoln headquarters on September 14, after 13 weeks in the field.

The second River Basin Surveys party in the Oahe Reservoir area, comprising a crew of seven, was directed by Charles H. McNutt. At the beginning of the year they were camped with Dr. Stephenson's party near Fort Sully and were excavating in the nearby C. B. Smith site (39SL29) on the left bank of the Missouri River in Sully County, S. Dak. They uncovered major sections of 2 large circular earth lodges, 10 cache pits, and 17 other features, and tested 2 extensive midden areas. This proved to be a moderately large earth-lodge village site of about the early 17th century. After the completion of work there, the party moved to the nearby Sully School site (39SL7) and excavated 2 houses, 12 cache pits, and 9 other features, tested one midden area, and trenched a portion of the fortification ditch and palisade. One of the houses had been a long, rectangular structure with an entry ramp to the south, while the other was a large circular structure. The two occupations thus indicated suggest that one belonged to a period approximating that of the C. B. Smith site, while the other was considerably earlier—perhaps between A. D. 1200 and 1400. The fortification ditch and palisade apparently surrounded the later period occupation. In addition to the excavations at those two sites, the McNutt party investigated two lesser sites in the vicinity. One, 39SL9, was a small occupation area with a few surface remains. Testing there gave no promise of significant returns for intensive digging and no further work was attempted. The other, 39SL10, was a burial site along the edge of the present river bank. Stream cutting had destroyed all but the last vestiges of it, and there was little to salvage. The party disbanded and returned to the Lincoln headquarters on September 14, after 13 weeks of work.

The third River Basin Surveys party in the Oahe Reservoir area was directed by Dr. Waldo R. Wedel, who was detailed to the River Basin Surveys for the summer by the department of anthropology of the U. S. National Museum. Dr. Wedel and a crew of nine worked near the Old Fort Bennett area on the right bank of the Missouri River in Stanley County, S. Dak. The party conducted intensive excavations in site 39ST203, where it uncovered two large circular earth lodges dating around the 17th century and two large long-rectangular houses of a much earlier period, perhaps the 14th or 15th centuries. The

floors of the circular houses were $1\frac{1}{2}$ to $2\frac{1}{2}$ feet below the surface, while those of the rectangular structures were $3\frac{1}{2}$ to 4 feet. Other features excavated in this site include a burial pit with the remains of five individuals, and evidence of burning over the top of the corpses. The party also excavated a circular house and a large portion of the stockade line at the nearby site, 39ST50. This small fortified village of the late 18th or early 19th century may possibly be the Truteau village of the mid-1790's. Glass bottles and considerable metal were found in the site. Dr. Wedel's party disbanded on August 19, after 8 weeks of excavation.

The fourth River Basin Surveys party in the Oahe Reservoir area was directed by Donald D. Hartle. It consisted of a crew of seven and shared a joint field camp with the Wedel party. This party dug test excavations in three sites during the season. At 39ST11, two houses, nine cache pits, and several other features were excavated. The houses were small rectangular structures with single end posts, evenly spaced side-wall posts, and entrance ramps. Of especial interest was the small size and short-rectangular shape of these houses, distinguishing them from the long-rectangular structures of more usual occurrence. Architecture and artifact collections suggest affiliation with the early sedentary Anderson Focus of the 14th or 15th centuries. Another interesting feature was the remains of three people who had died within a corner of one of the houses. With them were a whole pottery vessel and some fragments of basketry. In 39ST23, a dwelling house, a ceremonial lodge, several cache pits, a palisade and fortification ditch, and several other features were excavated. The pottery and circular houses suggest an Arikara occupation of perhaps the 17th or 18th century. The ceremonial house contained an altar, and the wall posts were set in a trench around the base of the wall. At 39ST45, three houses, several cache pits, two palisade bastions, and several other features were excavated. This site was occupied at two different times at least, since one house was rectangular and two were circular. The rectangular house was short and small and represents an occupation very closely related to that of site 39ST11. The circular house occupation was not entirely clear, but appears to have been representative of a culture pattern somewhat earlier than that of site 39ST23. The two palisade bastions were oval in pattern and extended laterally from a fortification palisade. This field party ended its work on August 24, after 9 weeks in the field.

The River Basin Surveys' mobile survey and testing crew of three, under the direction of Harold A. Huscher, moved from the Big Bend Reservoir area on September 3 and began a site survey and testing operation in the Oahe Reservoir area between the mouth of the Cheyenne River and Whitlocks Crossing on the right bank of the Missouri River. Heavy vegetation growth and much rain during

the season prevented the party from doing extensive site mapping or reconnaissance in the area, but several of the larger sites were visited and surface collections were made. A site map and exploratory tests were made at 39AR8, which appears to be related to the Huff site in North Dakota. Six other large sites were located and recorded for the first time in this area. The party disbanded on September 16, after 2 weeks in the Oahe Reservoir area.

The 1958 field season in the Missouri Basin began in the Big Bend Reservoir area on May 11 with a small party exploring in the vicinity of the Medicine Crow site (39BF2). William N. Irving with a crew of three and Mrs. Kathryn H. Clisby, pollen specialist from Oberlin College, Ohio, collected samples of fossil pollen from various localities in the area. Upon Mrs. Clisby's departure, Irving and his crew prepared a detailed map of the Medicine Crow site. On June 10 he increased his party to eight crewmen and added an assistant trained in geology to work with him on stratigraphic terrace sequences relating to the geology of the site and its immediate vicinity. They located one new site containing a large mammalian fossil in a terrace fill deposit and another site with columnar fire hearths exposed in a cut bank of the river. Intensive excavations continued in area B at the Medicine Crow site, and by the end of the year were progressing through the upper 3 feet of the preceramic zones.

On May 19, the second River Basin Surveys field party began operations in the Big Bend Reservoir area. This was a party of 10 under the direction of Robert W. Neuman excavating at two sites near Old Fort Thompson on the left bank of the Missouri River. Part of this crew continued work begun last season in the Akichita site (39BF221) in an attempt to learn details of architectural features. Extensive trenching had failed to find any traces of a house structure by the end of the year, although much midden refuse added significantly to the specimen inventory. The second section of the crew continued work begun last season at the Truman Mound site (39BF224). In that mound group, Mounds 5 and 6 were excavated during June, thus completing work at the site. In both mounds secondary burials accompanied by shell, disk, and bone beads were found. Beneath Mound 6, several projectile points, bone beads, and other artifacts were found. This party planned to concentrate the remainder of the field season on the several other mound sites in the immediate vicinity.

The third River Basin Surveys party in the Big Bend Reservoir area in June consisted of a crew of seven led by James J. F. Deetz. It began work on June 10 and spent the remainder of the month in excavations in areas A and C of the Medicine Crow site (39BF2). Midden areas were trenched, and one circular earth lodge was excavated. This lodge was actually two closely superimposed structures.

Work was continuing at this site at the end of the year. The field parties of Irving, Neuman, and Deetz shared a joint field camp near the Medicine Crow site.

The fourth River Basin Surveys field party in the Big Bend Reservoir area in June was composed of a crew of 13 directed by Dr. Warren W. Caldwell. It began work on June 10 at the Black Partizan site in an effort to complete excavations started last season. By the end of the year a circular (or more exactly an octagonal) earth lodge had been completely excavated and a midden area trenched.

The fifth River Basin Surveys party in the Big Bend Reservoir area consisted of a crew of seven led by Bernard Golden. It began work on June 10 at the Hickey Brothers site (39LM4) and spent the remainder of the year excavating midden deposits and one circular depression that appeared to be an earth-lodge ruin. Artifact inventory was small as of the end of the year. The Caldwell and Golden parties shared a joint camp at the Black Partizan site.

In the Oahe Reservoir area, four River Basin Surveys parties were in the field during the month of June and a fifth party was scheduled to begin work early in the next fiscal year. The first party in the area had a crew of 10 under the direction of Charles H. McNutt. This group began on June 16, and spent the rest of the month continuing excavations begun last season at the Sully School site (39SL7). There, a long expanse of the fortification stockade was uncovered, and work was well under way toward excavation of circular earth-lodge structures.

The second River Basin Surveys party in the Oahe Reservoir area in June consisted of a crew of 23 under the direction of Dr. Robert L. Stephenson, with Lee G. Madison as assistant. They began work on June 16 on the Sully site (39SL4) and by the end of the year had exposed the floors and other features of three circular earth-lodge structures. Artifact inventories were abundant in all 3, and an area surrounding 3 sides of each of 2 of the houses was being exposed in order to learn the nature of materials outside the houses.

The third River Basin Surveys party at work in the Oahe Reservoir area by the end of the year was that of Richard P. Wheeler. It consisted of a crew of eight and was working on the Fort Bennett site (39ST12), on the right bank of the Missouri River near Old Fort Bennett in Stanley County, S. Dak. That party began work on June 19, and by the end of the year had started the clearing of three circular earth-lodge structures.

On the last day of the year, a fourth River Basin Surveys party started work in the Oahe Reservoir area. It was comprised of a crew of six, under the direction of William M. Bass III, and was to excavate the extensive burial area at the Sully site (39SL4).

The McNutt, Stephenson, and Bass parties shared a joint field camp in the vicinity of the Sully site. Such 2- and 3-party field camps were proving to be efficient and economical, as many of the activities and expenses of several parties could be combined. The necessary field equipment, vehicles, number of cooks, and other expenses were proportionately reduced. The consultative advantage of having two or three archeologists in a single camp was proving to be of great help in discussions pertaining to excavation methods and general archeological interpretations.

Cooperating institutions in the Oahe Reservoir area at the beginning of the fiscal year included a party from the University of South Dakota directed by Dr. Wesley R. Hurt, Jr.; a party from the University of Idaho under the direction of Dr. Alfred Bowers; and a party from the State Historical Society of North Dakota, directed by Daniel J. Scheans. At the end of the fiscal year cooperating institutions in the Oahe Reservoir included a party from the University of South Dakota directed by Eugene Fugle; a party from the University of Idaho directed by Dr. Alfred Bowers; a party from the State Historical Society of North Dakota and the University of North Dakota combined, directed by Dr. James H. Howard. In other reservoirs in the Missouri Basin cooperating institutions had parties in the field at the beginning of the year as follows: The University of Wyoming, with a party directed by Dr. William Mulloy in the Glendo Reservoir of southeastern Wyoming; the University of Kansas, with a party directed by Dr. Carlyle S. Smith in the Tuttle Creek Reservoir of northeastern Kansas; and the University of Missouri with a party directed by Carl Chapman in the Pomme de Terre Reservoir of west-central Missouri. At the end of the fiscal year cooperating institutions were: The University of Wyoming with a party directed by Dr. William Mulloy in the Glendo Reservoir area and the University of Missouri with a party directed by Carl Chapman in the Pomme de Terre Reservoir area. All these parties were operating through agreements with the National Park Service and were cooperating in the Smithsonian Institution research program.

During the time that the archeologists were not in the field, they were engaged in analyses of their materials and in laboratory and library research. They also prepared manuscripts of technical, scientific reports and wrote articles and papers of a more popular nature.

During January the first steps were taken by the staff archeologists of the Missouri Basin Project toward a long-range Missouri Basin Chronology Program. This program is a new departure in the field of salvage archeology and is directed toward a more precise understanding of the time sequences of the prehistoric cultures represented in the sites being excavated in the Missouri Basin. One primary objective of the program is to be able to plan future salvage excavations

with increased efficiency. The program includes intensive research in dendrochronology, radiocarbon-14 dating, pollen analysis, geologic-climatic dating, typological analyses of artifact materials, historical documentation, and the several subsidiary techniques applicable to chronology. Ultimately the program should provide a specific time scale into which each of the culture complexes represented in the excavated sites can be fitted with pinpoint accuracy. In the second half of the fiscal year the Missouri Basin Chronology Program made several significant accomplishments. A large wall chart and map were prepared, showing temporal position and geographic location of all of the archeologically pertinent carbon-14 dates so far available. A series of 11 radiocarbon-14 specimens were submitted to the University of Michigan for dating. The available dendrochronological materials on hand in the Missouri Basin were analyzed, and a determination was made of what further material is needed. Plans were also made for procuring additional dendrochronological specimens upon which a series of local master plots can be built. Pollen samples from ancient bog areas were collected and submitted to Oberlin College for analyses, and plans were made for further collecting of fossil pollens. A man with geological training was temporarily added to the staff to work out a terrace-system sequence along a portion of the Missouri River, and a series of specimens was submitted to the University of Michigan proportional counter laboratory for analyses. Representatives from several State institutions are also cooperating in the program.

The laboratory and office staff devoted its time to processing specimen materials for study, photographing specimens, preparing specimen records, and typing and filing of records and manuscript materials. The accomplishments of the laboratory and office staff are listed in the following tables.

TABLE 1.—*Specimens processed July 1, 1957–June 30, 1958*

Reservoir	Number of sites	Catalog numbers assigned	Number of specimens processed
Big Bend.....	34	8, 290	52, 718
Oahe.....	13	5, 417	38, 864
Toronto.....	29	901	1, 304
Sites not in reservoirs.....	5	23	212
	81	14, 631	93, 098
Collections not assigned site numbers.....	2	9	9
Total.....	83	14, 640	93, 107

TABLE 2.—*Record materials processed July 1, 1957–June 30, 1958*

Reflex copies of records	9,240
Photographic negatives made	2,946
Photographic prints made	11,521
Photographic prints mounted and filed	5,182
Transparencies mounted in glass	1,122
Color pictures taken in the laboratory	368
Plate layouts made for manuscripts	92
Cartographic tracings and revisions	220
Plates lettered	37
Artifacts sketched	58
Profiles drawn	16

As of June 30, 1958, the Missouri Basin Project had cataloged 917,370 specimens from 1,762 numbered sites and 52 collections not assigned site numbers. During the current fiscal year, 8 pottery vessels and 37 pottery vessel sections were restored, and 104 nonpottery artifacts were repaired. Archeological specimens from 236 sites in 5 reservoirs were transferred to the United States National Museum, as were selected specimens of dog, bird, and fish bones, and of shell. Pottery specimens and stone projectile points were transferred to Region Two of the National Park Service for use as display material at Wind Cave National Monument in South Dakota. The Missouri Basin Project received, by transfer from the Nebraska State Historical Society, through the courtesy of Marvin F. Kivett, sample pottery specimens from four prototypical Nebraska sites. Cultural units and sites of these type specimens are: Dismal River, the Lovett site (25CH1); Lower Loup, the Burkett site (25NC1); Oneota, the Leary site (25RH1); and Valley Woodland, the Schultz site (25VY1). These specimens are now a part of the Missouri Basin Project comparative collection. The Missouri Basin Project also received by transfer from the University of Kansas Museum of Natural History, through the courtesy of Dr. Carlyle S. Smith, archeological collections from two sites in the Fort Randall Reservoir area. This was a permanent transfer of excavated materials which increased materially the research value of Missouri Basin Project collections.

During the Thanksgiving weekend, members of the staff participated in the 15th Plains Conference for Archeology, held in Lincoln. On April 19, members of the staff presented papers at the annual meeting of the Nebraska Academy of Sciences, also held in Lincoln. On April 30 and May 1 and 2, members of the staff attended and participated in the annual meeting of the Society for American Archeology held in Norman, Okla.

Dr. Robert L. Stephenson, chief, when not in charge of field parties, devoted most of his time to managing the office and laboratory in Lincoln and preparing plans for the 1958 summer field season. He spent

some time working on a summary report of the Missouri Basin Salvage Program for the calendar years 1952-56 and wrote several short papers for presentation before scientific groups. He also worked on a manuscript on the "Archeological Investigations in the Whitney Reservoir, Texas," and prepared text, pictures, and captions for a photographic booklet, "The Inter-Agency Archeological Salvage Program, After Twelve Years." During the second half of the year, he served as chairman of the Missouri Basin Chronology Program. In August he addressed the Pierre, S. Dak., Rotary Club on "Archeological Salvage in South Dakota." In October he addressed the Fidelia Lyceum in Lincoln, Nebr., on "Prehistoric America in Missouri Basin." In January he attended and participated in the annual meeting of the Committee for the Recovery of Archeological Remains, held in Washington, D. C. On April 19 he attended the annual meeting of the Nebraska Academy of Sciences, held in Lincoln, and presented a paper on "The Missouri Basin Chronology Program." On April 30 and May 1 and 2, at Norman, Okla., he attended the annual meeting of the Society for American Archeology and participated as a discussant of a paper presented by Robert Bell, entitled "Caddoan Relationships to the Plains."

Dr. Warren W. Caldwell, archeologist, during the fall and winter months devoted most of his time to analyses of specimen materials recovered from sites he had excavated over the past year. He completed all plates, figures, and manuscript text for the final report "Archeological Investigations in the Coralville Reservoir, Iowa." He also completed all plates, figures, and manuscript text for the final report, "Archeological Salvage Investigations in the Hell's Canyon Area, Snake River, Oregon and Idaho." He prepared a brief technical manuscript, "Firearms and Connotive Materials from Fort Pierre II (39ST217), Oahe Reservoir, South Dakota," and a brief popular article, "The Smithsonian Institution in Arkansas." The latter was published in the June issue of *The Ozark Mountaineer*. Dr. Caldwell also submitted a short note for publication in the *Davidson Journal of Anthropology* entitled "Pacific Coast Clay Figurines: A Contraview." He submitted a book review of "Northwest Archeology," *Research Studies of the State College of Washington*, vol. 24, No. 1, that was published in *American Antiquity*, vol. 23, No. 2, 1957. During the second half of the year he served as dendrochronology chairman of the Missouri Basin Chronology Program.

Donald D. Hartle, temporary archeologist, on the staff at the beginning of the year, left the project on August 26 to resume his graduate studies. Mr. Hartle was formerly a regular member of the staff at Lincoln and is still working on reports of work done at that time. He also is preparing a report on the results of his investigations during the 1957 field season in the Oahe Reservoir area.

Harold A. Huscher, temporary archeologist, on the staff at the beginning of the year, was transferred to the Washington office on January 27 to carry on the explorations in Alabama-Georgia previously discussed. Between his return from the field on September 16 and his departure for the Southeast, Mr. Huscher wrote a rough draft of a manuscript covering his work in the Missouri Basin in the summers of 1956 and 1957—"Appraisal of the Archeological Resources of the Big Bend Reservoir, South Dakota." He also prepared the preliminary draft of a brief technical manuscript on earth-lodge village fortifications in the Missouri Basin, and presented it as an oral report at the 15th Plains Conference for Archeology in Lincoln on November 28. He participated in the initial stages of the Missouri Basin Chronology Program.

William M. Bass III, temporary physical anthropologist, left the staff on August 28. He rejoined the staff in the same capacity on June 2 and remained in the Washington office until June 20, when he proceeded to the Lincoln office where he spent five days working on a comparative human skeleton. He left for the field in the Oahe Reservoir area on June 28.

William N. Irving, temporary archeologist, was appointed to the permanent staff on May 18. When not in the field directing excavations, he was in the Lincoln office analyzing materials he excavated during the preceding summer and investigating the geological possibilities of the Medicine Crow site (39BF2). He presented a preliminary report on the archeology of the Medicine Crow site at the 15th Plains Conference for Archeology on November 28, and a report on the chronology of the Medicine Crow site at the annual meeting of the Nebraska Academy of Sciences on April 19. On May 1 he went to Norman, Okla., and presented a paper on the chronological relationships of the early part of the Medicine Crow site at the annual meeting of the Society for American Archeology. During the second half of the year he served as geology chairman of the Missouri Basin Chronology Program.

James J. F. Deetz, temporary archeologist, joined the staff on June 2, and on June 10 left Lincoln for South Dakota to excavate a series of sites in the Big Bend Reservoir area.

Alan H. Coogan, temporary field assistant, joined the staff on June 2, and on June 10 left Lincoln for the field to serve as assistant to William N. Irving in the geological-archeological work in the vicinity of Old Fort Thompson in the Big Bend Reservoir area.

Bernard Golden, temporary archeologist, joined the staff on May 19 and on June 10 left Lincoln to begin excavations in an earth-lodge village site in the Big Bend Reservoir area.

Charles H. McNutt, archeologist, when he was not in the field, devoted most of his time to analyses and the preparation of reports. He

served as carbon-14 chairman, during the second half of the year, in the Missouri Basin Chronology Program. He completed the final draft of a major technical manuscript covering part of his previous summer's work, entitled "Archeological Investigations in the C. B. Smith Site (39SL29), Oahe Reservoir, South Dakota." He also completed the final draft of an unfinished manuscript begun by Harold A. Huscher, entitled "Appraisal of the Archeological Resources in the Big Bend Reservoir Area, South Dakota." On November 28, he presented a paper, "Excavations at Two Sites in the Oahe Reservoir, Sully County, South Dakota," at the 15th Plains Conference for Archeology in Lincoln. On April 18 he presented a paper entitled "La Roche Ware and Relative Chronology" at the annual meeting of the Nebraska Academy of Sciences in Lincoln. From April 30 to May 3 he attended the annual meeting of the Society for American Archeology in Norman, Okla. He was senior author, with Richard P. Wheeler, of a brief article entitled "Bibliography of Primary Sources for Radio-carbon Dates," which was submitted in June for publication in the Notes and News section of *American Antiquity*.

Robert W. Neuman, temporary archeologist, was appointed to the permanent staff on July 29. During the time he was not directing field activities he was busy completing the analyses of the data and materials he had collected and preparing reports on his previous seasons' work. He completed the final draft of a major technical manuscript entitled "Archeological Investigations in the Lovewell Reservoir Area, Kansas." On November 28, he presented a paper, "Excavations in Four Sites in the Big Bend Reservoir Area, South Dakota." On April 19 he attended the annual meeting of the Nebraska Academy of Sciences in Lincoln, and from April 30 to May 3 attended the annual meeting of the Society for American Archeology in Norman, Okla.

G. Hubert Smith, archeologist, during the periods he was not in the field, devoted his time to completion of final drafts of two major technical reports and one minor report. One major technical report was "Archeological Investigations at the Site of Fort Berthold II (32ML2), Garrison Reservoir, North Dakota"; the second was "Archeological Investigations at the Site of Fort Pierre II (39ST217), Oahe Reservoir, South Dakota." A brief report on excavations at site 39LM241 was also completed. On November 29, he served as chairman for a section of the Plains Conference for Archeology, devoted to historic sites archeology, and summarized the reports of the seven speakers. He submitted a book review of "New Discoveries at Jamestown" by John L. Cotter and J. Paul Hudson, which was published in the Autumn 1957 issue of *Archeology*. On January 2, Mr. Smith was detailed, on a reimbursable basis, to the

National Park Service to conduct archeological excavations at the site of Fort McHenry in Baltimore, Md.

Richard P. Wheeler, archeologist, was at the Lincoln headquarters throughout the year until June 20. During this period he spent his time preparing technical reports on work completed in previous years. He completed the final section of a draft of a lengthy, detailed report on excavations conducted during 1949-51 in the Angostura Reservoir area in South Dakota and the Boyson and Keyhole Reservoir areas in Wyoming. He also completed the draft of a technical report on excavations in the Jamestown Reservoir area in North Dakota. At the 15th Plains Conference for Archeology, in Lincoln, he presented a preliminary statement on the Stutsman Focus, and a paper, jointly with Harry E. Weakly, dealing with the cultural and chronological sequences at Birdshead Cave, Wyo. A third paper presented at that meeting dealt with radiocarbon dates and prehistory in the central and northern Plains. As previously mentioned, he collaborated with Charles H. McNutt in preparing a paper for submission to *American Antiquity*. From April 30 to May 3 he attended the annual meeting of the Society for American Archeology in Norman, Okla.

Snake River Basin.—No field explorations were carried on in the Snake River Basin during the fiscal year. However, one report on the investigations made there during the previous year was completed. It is called "Archeological Salvage Investigations in the Hell's Canyon Area, Snake River, Oregon and Idaho." The manuscript consists of 95 typed pages and has 8 plates and 6 text figures. The material and information upon which the report is based were mainly from two sites in the vicinity of Robinette, Oreg. Another report pertaining to the excavations on the Idaho side of the river at Big Bar has not yet been completed, but it is well under way.

South Carolina-Georgia.—Excavations were made at two sites in the Hartwell Reservoir Basin during the period from April 22 to June 21. One of them was located in South Carolina and the other in Georgia. In addition, three other sites in the South Carolina area were inspected and an extensive surface collection of artifacts was made at one of them. Owing to the refusal of the owner to permit digging, no attempt was made at the latter site to determine its depth or the extent of its deposits.

One of the sites where digging was carried on is located in the fork created by the juncture of the Tugaloo and Chauga Rivers. The site originally consisted of one large mound flanked on either side by a low mound. During the last 10 to 12 years the large mound was intentionally reduced in height in order to facilitate cultivation of the field where it is situated. Consequently its present height of 12 feet above the level of the bottom lands does not represent its

original height and its contour has also been modified. Four test areas were dug in the vicinity of the present apex of the mound to determine if possible where the original apex had been, and also to discover the physical makeup of the feature and the possible purpose for its construction. One of the test areas exposed the outline of a rectangular structure with rounded corners and a subterranean floor. The posts which had formed the walls had been placed at 2-foot intervals. Because of lack of time the house remains were not completely excavated. Enough was done, however, to determine its general characteristics. Two of the other test areas showed that the mound had been erected in several stages over a period of years. In each case the exterior mantle consisted of a hard-packed bluish-gray sandy clay which varied from 3 to 6 inches in thickness. Each mantle in turn had been spread over a layer of clean river sand averaging 1 foot 3 inches in thickness. There had been at least four such features, and additional digging may reveal still earlier ones. Not much artifact material was recovered, but such as was found indicates that the latest culture represented probably was Cherokee with an earlier underlying Etowah horizon. The site may well have been that of the Cherokee village and mound known as Chauga.

On the Georgia side of the Tugaloo River approximately 2 miles downriver from the Yonah Dam of the Georgia Power Co. is a village and mound site which also has Cherokee affinities. This is the largest site in the Hartwell Basin and lies on a sandy ridge 1,000 feet long and 150 feet wide which parallels the river. There was a small mound 150 feet from the northern limits of the ridge which upon excavation proved to be quite unusual. The top layer or mantle consisted of a sandy humus. This covered a small mound of river cobblestones of various weights and diameters which was approximately 2 feet in height and 18 feet in diameter. Directly underneath the base of the rock mound was a series of seven heavy-packed ash and calcined bone-filled basin-shaped hearths. Each of the hearths was circular in outline and averaged slightly over 5 feet in diameter and from 1 foot to 18 inches in depth. Because of the presence of the fragmentary calcined bones it was thought that the basins served as crematory areas over a long period of time. After the last or uppermost hearth had served its purpose, the cobblestone mound was erected over the crematory area, perhaps to indicate that it was a place of particular significance or to protect the features lying beneath it. Thus far such a manifestation is unique in southeast archeology and it may indicate a local cult which has previously passed unnoticed or has not been reported.

Adjacent to and south of the mound were the remains of three houses representing different types of structure. The uppermost was approximately square and the walls had been constructed by placing

individual posts in prepared post holes. Directly beneath those remains was evidence for a large rectangular "town-house" type of structure measuring 44 feet in length and 26 to 27 feet in width, with the doorway opening toward the south. The individual post form of construction had also been used in erecting that structure. Immediately beneath it and resting upon sterile red clay were the fragmentary remains of two small circular trench-type houses, the earliest form of house found throughout the Southeast. Additional work at this location would undoubtedly yield further evidence pertaining to the sequence of house forms and might also give a clue to their significance.

Two unusual ceremonial burials were found in a test area some 40 feet from the house remains. Tubular-shaped pits with saucer-shaped bottoms had been dug in the clean sterile sand of the ridge. The pits were approximately 2 feet in diameter and the walls of one had been lined with small cobblestones, while those in the other were left in their natural state. At the bottom of each pit, 5 feet 5 inches below the surface, were the fragmentary remains of a human cranium. Other bones may originally have been present, but they had long since disintegrated. The rock-lined pit was filled with a dark humic soil intermixed with some stones, while the other was filled with clean river sand. These burials may represent a new trait for that section of South Carolina, Georgia, and the Southeast. The specimens collected during the course of the work suggest that it was of Cherokee origin. The site has been identified, tentatively, as that of the Cherokee Lower Settlements town of Estatoee by some. Others think further evidence is needed to demonstrate that such was the case, since historically it supposedly was on the South Carolina side of the river. Additional excavations are certainly warranted at that location.

Cooperating institutions.—In addition to the several State and local institutions cooperating in the Missouri Basin, others participated in the Inter-Agency Salvage Program in a number of areas. The University of Arizona carried on investigations in the Painted Rocks Reservoir basin on the Gila River in Arizona. The Museum of Northern Arizona continued its explorations in the Glen Canyon Reservoir area on the Colorado River. The University of Utah also cooperated in the Glen Canyon project, working the upper end of the basin. The University of California made surveys and conducted excavations in the Trinity Reservoir area on the Trinity River, the Terminus Reservoir on the Kaweah River, in the Coyote Valley Reservoir area on the Russian River, and in the Washoe Reservoir basin on the Truckee River. The University of Southern California

worked in the Buena Vista watershed project and the Arroyo Grande Creed watershed project in California. Idaho State College made surveys along the Upper Snake, the Salmon, and Middle Fork Rivers in Idaho. The University of Southern Illinois carried on surveys and excavations in the Carlyle Dam area on the Kaskaskia River in south-central Illinois. In New Mexico the School of American Research excavated in the Abiquiu Reservoir area along the Chama River and made surveys in the Navajo Reservoir area along the San Juan River in northern New Mexico and southwestern Colorado. The University of Oklahoma participated in three projects. One consisted of a reexamination of the Fort Gibson Reservoir basin on the Grand or Neosho River. Surveys and excavations were made there a number of years ago before the dam was completed and the area flooded. Because of a greatly lowered pool level last year it was possible to return to the area and examine a number of sites which had been under water for some time. The other two projects of the University of Oklahoma were in the Sandy Creek Reservoir area along the Blue River and Waurika Reservoir basin along Beaver Creek, a tributary of the Red River. The University of Oregon surveyed and excavated in two reservoir basins. One was the Immigrant on Beaver Creek, a tributary of the Rogue River, and the other was the John Day along the Columbia River. The University of Texas continued its excavation project at the Ferrell's Bridge Reservoir along Cypress Creek, a tributary of the Red River in eastern Texas. The State College of Washington continued excavations in the Ice Harbor Reservoir area along the Lower Snake River in southeastern Washington. In the New England area surveys were made on a personal contract basis by one member of the Department of Anthropology at Harvard University and by a member of the faculty from Temple University at Philadelphia. All these projects were carried on under agreements with the National Park Service. In several areas local groups continued to assist on a voluntary basis. These activities were mainly in Ohio, Indiana, and southern California.

ARCHIVES

The Bureau archives continued during the year under the custody of Mrs. Margaret C. Blaker. From June 1 to 6 Mrs. Blaker examined pictorial and manuscript collections relating to the American Indian in the University of Pennsylvania Museum in Philadelphia, and in the American Museum of Natural History, the Museum of the American Indian, the New York Historical Society, the New York Public Library, and the Frick Art Reference Library in New York. On June 13 Miss Barbara Hemphill entered on duty as a summer interne, detailed to the archives.

Photographic collections.—Anthropologists, historians, publishers, and interested members of the public continued in increasing numbers to draw upon the extensive photographic collections of the Bureau as a source of documentation and illustration. The year's total of 534 orders and written and personal inquiries concerning photographs represents a 20-percent increase over the previous year's figure of 444, and is almost double the 1956 total of 294. The 1,231 prints distributed is also an appreciable increase over the 1,019 of last year and 978 in 1956. The preparation and distribution, during the past 2 years, of descriptive lists of specific portions of the photographic collections have undoubtedly made more searchers aware of the photographic resources of the Bureau, the result being an increased number of purchase requests. Lists describing photographs relating to 86 tribes or subjects are now available; 21 such lists were prepared during the past year.

There were 22 new photographic collections received during the year, some of which are described below:

A very important collection relating to North American Indians was received by transfer from the Library of Congress. It consists of some 7,200 photographs pertaining to over 120 tribal units of the United States, Alaska, and Canada; the Southwest, the Northwest Coast, the Plains, and the Great Lakes areas are particularly well covered. The photographs were made by professional photographers from approximately 1890 to 1920, and are of excellent photographic quality. Over two-thirds of them are outdoor views; the remainder are portraits, most of which are accompanied by the name of the individual. At year's end only a preliminary examination of the collection had been made. The arrangement and cataloging of the photographs by tribe and area will be a major project for the coming year.

An album of 60 photographs relating to the several Indian tribes residing on the Muckleshoot Reservation, Wash., in the period 1902-36 was received as a transfer from the Indian Claims Commission, through the courtesy of Arthur C. Ballard, who made and collected the photographs. The collection, with detailed captions, includes portraits of Indian informants and views of native activities and equipment such as fishing gear, firemaking equipment, ceremonial objects, houses, and tools.

A collection of about 40 photographs of Plains Indians made by commercial photographers of the late 19th century was received as a gift from the Pennsylvania Historical and Museum Commission, through John Witthoft, chief curator. Another group of 26 such photographs, including a number of Indian portraits by D. F. Barry, was lent for copying through the courtesy of Mr. Witthoft.

A series of about 35 negatives relating to the Acoma, Laguna, and Taos pueblos and to the Navaho and Paiute tribes, made by Vernon Bailey during the first decade of the 20th century, was received as a transfer from the Smithsonian library, where they had been deposited as a gift from Mrs. Vernon Bailey in 1945.

Thirteen photographs of Chiricahua and Mescalero Apache Indians, including recent portraits of some descendants of prominent Apache personalities of the 19th century, were received from Mrs. Eve Ball, of Hollywood, N. Mex. With the assistance of Apache informants, Mrs. Ball also provided identifications and notes on several photographs in the Bureau collections.

Copy prints of 24 portraits and views of activities at Carlisle Indian School, collected by O. H. Bakeless, ca. 1892-1902, were forwarded by Dr. Archibald Hanna as a gift from the Yale University Library, through the courtesy of John Bakeless, who owns the original prints.

Eight copy photographs relating to Indians of Michigan in the period 1865-ca. 1900, collected from various sources by the Michigan Historical Commission, were received as a gift from the Commission, through the courtesy of Dr. Philip P. Mason.

Mrs. Marion Vincent, of Sequim, Wash., lent for copying eight photographs of elderly Clallam Indians taken at various dates in the first half of the 20th century, including a portrait of old Doctor Hall, the boatmaker.

Richard Pohrt, of Flint, Mich., forwarded as a gift eight photographs of Indians of California and adjacent western States, made by commercial photographers about 1900.

Six photographs of Seminole Indians made in Collier County, Fla., ca. 1900-1928, were received from Dr. Charlton W. Tebeau, of Coral Gables, Fla., through Dr. William C. Sturtevant.

Two snapshots of the tombstone of Joseph Pawnee No Pashee, first governor of the Osage (d. 1883), located at Pawhuska, Okla., were received as a gift from R. B. Schackleford, of Pawhuska.

Manuscript collections.—There is a continued increase in the utilization of the manuscript collections by anthropologists and other students. About 305 manuscripts were consulted by searchers, either in person or by the purchase of 9,696 pages of reproductions. In addition, 68 mail inquiries concerning the manuscript collections were received, and a considerable number were examined by the archivist in preparing replies. As a result of this examination, new and more complete descriptions of 61 manuscripts were drafted for the catalog, annotations were added to numerous other catalog entries, and lists describing certain related groups were prepared for distribution.

Thirteen lots of manuscript material were received in the archives. The following have been cataloged and made available for reference:

4517. Beam, George L. (official photographer, Denver & Rio Grande Western Railroad). Miscellaneous correspondence and news clippings. Ca. 1917-27. 1 portfolio.

4507. Corbusier, William Henry. "Record of William Henry Corbusier, Colonel, U. S. Army, Retired." April 10, 1924. 80 pp., typed. Relates to the Apache Indians of Arizona.

4505. Gilfillan, J. A. Chippewa dictionary (original draft?), notes on place names, etc.; miscellaneous lot of notes, unarranged. Ca. 1911? 1 portfolio.

4521. Harrington, John P. Miscellaneous short manuscripts, unpublished. 1940-52 and n. d. 1 box. (Titles listed in catalog.)

3323. Marye, William B. Materials relating to the sites of Indian bridges, principally in Maryland and Virginia, and also in Delaware and North Carolina. 1932 ca.-1949 and 1956. 5 boxes.

4524. Marye, William B. "Indian Shell Heaps on Chesapeake Bay and its Estuaries in Maryland; Some Incomplete Data Collected by William B. Marye." 1913 ca.-1956. 1 portfolio.

4514. Newcomb, C. F. "Sketch of Southern Portion of Queen Charlotte Islands, B. C." 1901. Manuscript map, approx. 33" x 58".

4513. Niblack, Albert P. Notes and correspondence relating to the ethnology of the northwest coast of North America; miscellaneous papers, unarranged. Ca. 1884-89. 1 portfolio.

4525. Scott, Gen. Hugh L. Papers relating to Indian conditions, accumulated while serving on the Board of Indian Commissioners, February 25, 1919-July 25, 1933. 3 boxes. (Subject list in catalog.)

4504. Sturtevant, William C. "Notes on the History and Bibliography of Catawba Linguistic Studies." July-August 1957. 18 pp., typed.

A summary description of the holdings of the Bureau archives was prepared for the National Historical Publications Commission, U. S. National Archives, for inclusion in the guide to depositories of manuscripts in the United States being prepared by the Commission.

ILLUSTRATIONS

The Bureau staff artist, E. G. Schumacher, continued work during the year on a wide variety of artistic material for the Bureau of American Ethnology and River Basin Surveys. An appreciable amount of time was also devoted to various illustrative tasks needed by different departments of the Smithsonian Institution.

EDITORIAL WORK AND PUBLICATIONS

The Bureau's editorial work continued during the year under the immediate direction of Mrs. Eloise B. Edelen. There were issued one Annual Report and four Bulletins, as follows:

Seventy-fourth Annual Report of the Bureau of American Ethnology, 1956-1957. ii+28 pp., 2 pls. 1958.

Bulletin 164. Anthropological Papers Nos. 49-56. x+356 pp., 75 pls., 5 figs., 15 maps. 1957.

No. 49. The Ormond Beach Mound, east-central Florida, by Jesse D. Jennings, Gordon R. Willey, and Marshall T. Newman.

No. 50. Hair pipes in Plains Indian adornment, a study in Indian and White ingenuity, by John C. Ewers.

No. 51. Observations on some nineteenth-century pottery vessels from the Upper Missouri, by Waldo R. Wedel.

No. 52. Revaluation of the Eastern Siouan problem, with particular emphasis on the Virginia branches—the Occaneechi, the Saponi, and the Tutelo, by Carl F. Miller.

No. 53. An archeological reconnaissance in southeastern Mexico, by Matthew W. Stirling.

No. 54. Valladolid Maya enumeration, by John P. Harrington.

No. 55. Letters to Jack Wilson, the Paiute Prophet, written between 1908 and 1911, edited and with an introduction by Grace M. Dangberg.

No. 56. Factionalism at Taos Pueblo, New Mexico, by William N. Fenton.

Bulletin 165. Music of Acoma, Isleta, Cochiti, and Zuñi Pueblos, by Frances Densmore. xii+118 pp., 6 pls. 1957.

Bulletin 166. River Basin Surveys Papers, No. 8. Excavations in the McNary Reservoir Basin near Umatilla, Oregon, by Douglas Osborne. With appendixes by Marshall T. Newman, Arthur Woodward, W. J. Kroll, and B. H. McCleod. x+258 pp., 40 pls., 6 figs., 19 maps. 1957.

Bulletin 167. Archeological investigations at the mouth of the Amazon, by Betty J. Meggers and Clifford Evans. xxviii+664 pp., 112 pls., 206 figs. 1957.

The following publications were in press at the close of the fiscal year:

Bulletin 143, vol. 7. Index to the Handbook of South American Indians.

Bulletin 168. The Native Brotherhoods: Modern intertribal organizations on the Northwest coast, by Philip Drucker.

Bulletin 169. River Basin Surveys Papers, Nos. 9-14:

- No. 9. Archeological investigations in the Heart Butte Reservoir area, North Dakota, by Paul L. Cooper.
- No. 10. Archeological investigations at the Tuttle Creek Dam, Kansas, by Robert B. Cumming, Jr.
- No. 11. The Spain site (39LM301), a winter village in Fort Randall Reservoir, South Dakota, by Carlyle S. Smith and Roger T. Grange, Jr.
- No. 12. The Wilbanks site (9CK-5), Georgia, by William H. Sears.
- No. 13. Historic sites in and around the Jim Woodruff Reservoir area, Florida-Georgia, by Mark F. Boyd.
- No. 14. Six sites near the Chattahoochee River in the Jim Woodruff Reservoir area, Florida, by Ripley P. Bullen.

Bulletin 170. Excavations at La Venta, Tabasco, 1955, by Philip Drucker, Robert F. Heizer, and Robert J. Squier. With appendixes by Jonas E. Gullberg, Garniss H. Curtis, and A. Starker Leopold.

Bulletin 171. The North Alaskan Eskimo: A study in ecology and society, by Robert F. Spencer.

Bulletin 172. The story of a Tlingit community: A problem in the relationship between archeological, ethnological, and historical methods, by Frederica de Laguna.

Bulletin 173. Anthropological Papers Nos. 57-62:

- No. 57. Preceramic and ceramic cultural patterns in Northwest Virginia, by C. G. Holland.
- No. 58. An introduction to Plains Apache archeology—the Dismal River Aspect, by James H. Gunnerson.
- No. 59. The use of the atlatl on Lake Patzcuaro, Michoacan, by M. W. Stirling.

No. 60. A Caroline Islands script, by Saul H. Riesenber and Shigeru Kaneshiro.

No. 61. Dakota winter counts as a source of Plains history, by James H. Howard.

No. 62. Stone tipi rings in north-central Montana and the adjacent portion of Alberta, Canada: Their historical, ethnological, and archeological aspects, by Thomas F. Kehoe.

Publications distributed totaled 28,131 as compared with 28,558 for the fiscal year 1957.

COLLECTIONS

Acc. No.

216667. Late 18th-century wine bottle.

219119. Miscellaneous archeological objects.

FROM RIVER BASIN SURVEYS

216556. Archeological and human skeletal material from Nebraska, excavated by River Basin Surveys archeologists in the summer of 1948.

217608, 218413. Archeological material excavated from Buffalo Pasture site in Oahe Reservoir, Stanley County, S. Dak.

214120, 217212. (through Dr. Robert L. Stephenson) 21 land and fresh-water mollusks from Oregon, Wyoming, and South Dakota.

MISCELLANEOUS

Dr. John R. Swanton, ethnologist on the staff of the Bureau from 1900 to 1944 and a research associate since his retirement, died at his home in Newton, Mass., on May 2, 1958. Dr. Swanton is best known for his extensive work on the Indians of the Southeastern United States and as chairman of the DeSoto Commission. He was the author of 5 extensive articles in the *Annual Report* series of the Bureau, 12 complete Bulletins, 2 Anthropological Papers, and 2 papers in the *War Background Studies*. He was coauthor of three Bulletins and edited *Byington's Choctaw Dictionary*. His *The Indians of the Southeastern United States*, Bulletin 137, and *The Indian Tribes of North America*, Bulletin 145, are outstanding contributions. The report of the DeSoto Commission, of which he was the unnamed author, is in continuing demand. Dr. Swanton was a member of the National Academy of Sciences. He received the *Viking Medal and Award for Anthropology* in 1948.

Dr. John P. Harrington and Dr. A. J. Waring continued as research associates of the Bureau of American Ethnology. Dr. M. W. Stirling, as research associate, used the facilities of the Bureau laboratory and continued his study of collections made on field trips to Panama and Ecuador in previous years.

There were 2,772 letters of inquiry about American Indians and related problems received in the Director's office during the year.

Information was furnished by staff members in answer to many of the queries, and to others, information leaflets or other printed items were supplied.

Eleven bibliographies or information leaflets were prepared or revised and duplicated for distribution to the public, as follows:

SIL-16, 2d rev., 6/58. Indian Crafts and Indian Lore. (Bibliography.) 3 pp.
SIL-50, rev., 8/57. Selected List of Portraits of Prominent Indians in the Collections of the Bureau of American Ethnology. 3 pp.
SIL-90, rev., 3/58. Dealers in Second-Hand Scientific and Government Publications. 2 pp.
SIL-100, 8/57. Anthropology as a Career. 18 pp. (Reading list, pp. 14-18.)
SIL-105, 8/57. Selected Bibliography on Cherokee Customs and History. 4 pp.
SIL-132, 12/57. Selected References on the Middle American Area. 5 pp.
SIL-133, 12/57. Bibliography on Indian Languages and Language Families. 6 pp.
SIL-134, 12/57. American Indian Languages. (Explanation.) 2 pp.
SIL-137, 12/57. The Cherokee Language. (Explanation with references.) 2 pp.
SIL-174, 6/58. Selected References on the Indians of the Southeastern United States. 12 pp.
SIL-175, 6/58. Selected References on Present-day Conditions among United States Indians. 9 pp.

In addition to the leaflets described above, many bibliographies and information leaflets were compiled on topics of a general or specific nature, linguistic problems or terms, picture information, etc., and typescript copies sent out to hundreds of civic organizations such as the Scouts, Campfire Girls, summer camps, church clubs, and women's clubs throughout the country, as well as to the general public. The information files and bibliographic material were constantly reviewed by staff members so that the most up-to-date material for term papers could be sent in answer to hundreds of requests from high school and college students. Manuscripts were frequently read and appraised by staff members for colleagues and scientific organizations. Specimens were identified for owners and data on them supplied.

Respectfully submitted.

FRANK H. H. ROBERTS, Jr., *Director.*

Dr. LEONARD CARMICHAEL,
Secretary, Smithsonian Institution.



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Seventy-sixth Annual Report

OF THE BUREAU OF AMERICAN ETHNOLOGY

of the

BUREAU OF AMERICAN ETHNOLOGY

1958-1959



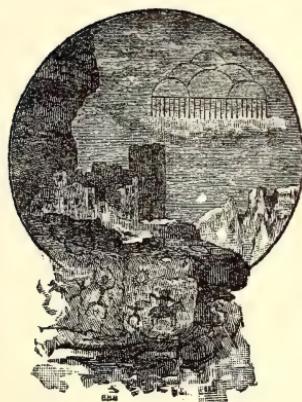
SMITHSONIAN INSTITUTION

WASHINGTON

D.C.

SEVENTY-SIXTH
ANNUAL REPORT OF THE
BUREAU OF
AMERICAN ETHNOLOGY
TO THE SECRETARY OF THE
SMITHSONIAN INSTITUTION

1958-1959



UNITED STATES
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BUREAU OF AMERICAN ETHNOLOGY

June 30, 1959

Director.—FRANK H. H. ROBERTS, Jr.

Anthropologists.—HENRY B. COLLINS, WILLIAM C. STURTEVANT,
WALLACE L. CHAFE.

Research Associates.—JOHN P. HARRINGTON, MATTHEW W.
STIRLING, A. J. WARING, Jr.

Archivist.—MRS. MARGARET C. BLAKER.

Scientific illustrator.—E. G. SCHUMACHER.

Administrative assistant.—MRS. JESSIE S. SHAW.

RIVER BASIN SURVEYS

Director.—FRANK H. H. ROBERTS, Jr.

Chief, Missouri Basin Project.—ROBERT L. STEPHENSON.

Archeologists.—WARREN W. CALDWELL, HAROLD A. HUSCHER,
WILLIAM N. IRVING, CHARLES H. McNUTT, CARL F. MILLER,
ROBERT W. NEUMAN, G. HUBERT SMITH.

SEVENTY-SIXTH ANNUAL REPORT

OF THE

BUREAU OF AMERICAN ETHNOLOGY

FRANK H. H. ROBERTS, JR. *Director*

SIR: I have the honor to submit the following report on the field researches, officework, and other operations of the Bureau of American Ethnology during the fiscal year ended June 30, 1959, conducted in accordance with the act of Congress of April 10, 1928, as amended August 22, 1949, which directs the Bureau "to continue independently or in cooperation anthropological researches among the American Indians and the natives of lands under the jurisdiction or protection of the United States and the excavation and preservation of archeologic remains."

SYSTEMATIC RESEARCHES

(Prepared from data submitted by staff members)

Dr. Frank H. H. Roberts, Jr., Director of the Bureau, devoted a portion of the fiscal year to office duties and the general supervision of the activities of the Bureau and the River Basin Surveys. In September he went to the Mesa Verde National Park in southwestern Colorado as a consultant to the Research Committee of the National Geographic Society. While there he visited a number of ruins that are to be excavated to obtain new information on the aboriginal people of the region and also to provide additional exhibit areas for visitors to the park. As a result of the conferences on the Mesa Verde, the National Geographic Society made a grant to the National Park Service to assist in the excavation program on Wetherill Mesa. It is contemplated that the digging will continue over approximately six field seasons. Following the sessions on the mesa, Dr. Roberts spent a day at Hovenweep National Monument on the Colorado-Utah line north of the McElmo Canyon area where the late Dr. J. Walter Fewkes, a former Chief of the Bureau, carried on investigations some 50 years ago. Judging from Dr. Fewkes's report and the condition of the area today, there has been little change since he first described the towers for which the area is famous.

After his return to Washington, D.C., Dr. Roberts went late in September to Athens, Ga., and visited a number of projects in other parts of Georgia and South Carolina where salvage operations were underway, and participated in discussions relative to continuing work

in the area. During the early part of November he went to Austin, Tex., where he attended the Second International Congress of Historians which was being held at the University of Texas. He served as one of the commentators at the session on Pre-Hispanic peoples in the southwestern United States and northern Mexico. Following his return to Washington he took part in the sessions of the American Anthropological Association, and toward the end of the month went to Lincoln, Nebr., to discuss various problems in Plains archeology with members of the Missouri Basin project staff and to attend the sessions of the Annual Plains Conference for Archeology. During December Dr. Roberts was a member of a panel at one of the sessions of the American Association for the Advancement of Science, where the subject of "Anthropology in the Federal Service" was presented.

In January Dr. Roberts attended the meetings of the Committee for the Recovery of Archeological Remains held at the Department of the Interior in Washington, D.C., and presented a summary of the results of the preceding year's activities of the River Basin Surveys. He also took part in discussions pertaining to future plans for the Inter-Agency Archeological Salvage Program. At the end of January he went again to Georgia where he met with representatives from the National Park Service, various State and local institutions, and assisted in the preparation of plans for a salvage program along the Chattahoochee River in Alabama and Georgia. Early in June he went to Colorado where he examined collections pertaining to early inhabitants of the Western Plains area at the Denver Museum of Natural History and in the University Museum at Boulder. Returning to Nebraska he spent several days at the field headquarters and laboratory of the Missouri Basin project at Lincoln where plans were being completed for the summer's investigations in reservoir areas along the Missouri River in South Dakota. From Nebraska Dr. Roberts returned to Washington.

During the fall and winter months Dr. Roberts reviewed several draft manuscripts of technical reports and returned them to their authors with suggestions for correction and revision. In addition, he did the technical editing on a series of six reports on historic sites archeology in the Missouri Basin which will appear as Bulletin 176 of the Bureau of American Ethnology.

Dr. Henry B. Collins, anthropologist, continued his Arctic research and activities. Material was assembled for an analysis of the "Tunnit" legends of the Canadian Eskimos, which describe in some detail the aboriginal inhabitants of the Canadian Arctic. On the basis of recent archeological investigations, particularly those by Dr. Collins in the Hudson Bay region, it appears that the mysterious Tunnits were in fact the prehistoric Dorset Eskimos rather than the

Thule as previously assumed. Also in preparation was an article evaluating recent archeological discoveries in Alaska and northeast Siberia and their bearing on pre-Eskimo and Eskimo culture sequences and relationships in the Bering Strait area.

In December Dr. Collins attended a 2-day conference on polar research held at Hanover, N.H., under the auspices of Dartmouth College and the National Academy of Sciences Committee on Polar Research. The conference discussed the probable future course of polar research in this country and the advisability of establishing a research institute to coordinate and administer scientific research in the Arctic and Antarctic.

In June Dr. Collins went to Burke County, Ga., to examine an old Indian village site near Waynesboro where Dr. Roland Steiner in the 1890's had collected an unusually large number of flint implements, now in the U.S. National Museum. The implements, numbering some 16,000, were of particular interest because most of them were deeply patinated and were types which are now recognized as belonging to the Archaic period; one of the types, an unusual form of asymmetric knife or scraper, was identical with a specialized form characteristic of the prehistoric Dorset culture of the eastern Canadian Arctic. Through the cooperation of Raymond De Laigle, clerk of court of Burke County, and his brothers, Ray and Roy De Laigle, it was possible to locate the site from county records. It was found to be very much as described by Steiner 70 years ago and still prolific in stone artifacts and rejectage. A sizable collection of flint implements and flakes from this and other sites around Waynesboro was brought back for study.

Dr. Collins continued to serve as a member of the research committee of the Arctic Institute of North America, which evaluates applications for research grants, and of the publications committee, which exercises supervision of the Arctic Institute's quarterly journal *Arctic*, its *Technical Papers*, and its series of *Special Publications*. As chairman of the directing committee, Dr. Collins also devoted considerable time to the planning, supervision, and financing of the *Arctic Bibliography*, which is prepared by the Arctic Institute for and with the support of the Department of Defense. This comprehensive reference work abstracts and indexes the contents of publications in all languages and in all fields of science relating to the Arctic and subarctic regions of the world. Volume 8, containing abstracts of 5,623 publications in 1,281 pages, was scheduled for publication by the Government Printing Office early in July 1959, and work on volume 9 is underway. Subject fields receiving special emphasis in volume 8 include body systems, human and other; botany; construction; disease; ecology; economic and social conditions; environmental effects

of darkness, light, and low temperature on man, animals, and plants; Eskimos; expeditions, especially Russian; fishes and fisheries; frost-bite; geology; hypothermia; ice and ice conditions; insects; meteorology; physiology, human and animal; Siberian native peoples; snow; transportation. These and some 230 other topics are listed alphabetically in the index and, as necessary, also under the name of the particular locality or major geographical region to which they pertain. Heretofore the *Arctic Bibliography* has been supported almost entirely by the Department of Defense. During the past year additional generous support has been provided by the National Science Foundation, the National Institutes of Health, and the National Geographic Society.

Dr. Collins also made plans for a Russian translation project whereby the Arctic Institute, with the support of the National Science Foundation, would make available to American anthropologists translations of Russian publications on the archeology, ethnology, and physical anthropology of Siberia.

Dr. William C. Sturtevant, ethnologist, spent the first part of the fiscal year in Washington at work on various projects related to his Seminole and Seneca research. He also prepared for publication a paper on the economic uses of *Zamia*, a cycad with a large underground stem from which starch has been extracted for centuries by various Indian and other inhabitants of the West Indies and Florida. Another paper brought to completion reconsiders, with negative results, the ethnological evidence for contacts between Indians of the southeastern United States and the West Indies (previously widely considered to have been quite significant for the history of the culture of the southeastern tribes). Brief papers were completed on the history of the classification of eastern Siouan languages (published in *American Anthropologist*), on the authorship of J. W. Powell's famous classification of North American Indian languages published by the Bureau of American Ethnology in 1892, and on two new techniques for ethnographic fieldwork. Dr. Sturtevant's pamphlet "Anthropology as a Career," issued by the Institution in July 1958, proved so useful to students and their advisers throughout the country that a second printing was required in May 1959.

In mid-February Dr. Sturtevant left for Florida to begin 6 months' fieldwork among the Seminole Indians, with the support of a grant from the National Science Foundation. This was a continuation of the fieldwork Dr. Sturtevant conducted among these people before joining the Smithsonian staff. Besides filling in gaps in information obtained during previous trips, Dr. Sturtevant has concentrated on studying Seminole knowledge and uses of plants, both wild and cultivated. These Indians are the only ones in the eastern United

States who still use agricultural techniques once common to all the Indians of this region but heretofore undescribed by careful observers. Fields are cleared by cutting and burning, planted without fertilizer, and soon abandoned for new fields when fertility decreases and weeds become difficult to control. In addition to the ancient North American Indian crops—corn, pumpkins, and beans—the Seminole grow a number of plants that were introduced from the West Indies during and after the 18th century (banana, sugarcane, sweetpotato, taro, elephantear [*Xanthosoma*], manioc, papaya, guava, citrus). Seminole knowledge of wild plants is also extensive, and they still use many of them for medicine, food, and in the manufacture of utensils and other artifacts. Dr. Sturtevant found that at least two dozen fields are being cultivated with aboriginal methods, but intensive study of these fields and other aspects of Seminole society and culture has been even more difficult than he anticipated, owing largely to increased political factionalism and antagonism toward inquisitive outsiders.

Dr. Sturtevant compiled genealogical information preparatory to collaboration with Dr. John Buettner-Janusch, a physical anthropologist at Yale University, on a study of the genetic characteristics (chiefly blood groups) of the Seminole, who certainly have fewer non-Indian ancestors than any other surviving eastern tribes.

Besides collecting herbarium specimens of plants used and recognized by the Indians, Dr. Sturtevant made an ethnological collection to supplement the Seminole holdings of the National Museum. He paid particular attention to clothing, since Seminole styles have changed rapidly but are still unique in many respects, and objects made for sale. The latter are an important part of Seminole economy and involve objects quite different from those usually made for sale by other tribes.

Dr. Wallace L. Chafe, ethnologist, joined the staff of the Bureau in April but did not report for duty until June as he was completing teaching duties at the University of Buffalo. Dr. Chafe spent the 3 weeks before departing on June 29 in preparing for fieldwork on the Seneca reservations in western New York State. He will gather material that will enable him to complete a Seneca dictionary and will make further tape recordings of religious and mythological texts. This work was started under the sponsorship of the New York State Museum and Science Service and is being continued as a cooperative effort.

On June 3, 1958, Carl F. Miller was temporarily transferred from the staff of the River Basin Surveys to that of the Bureau of American Ethnology in order that he might continue directing the excavations of the Smithsonian Institution-National Geographic Society

Expedition which had been started in 1956 at Russell Cave in Alabama. This third season of work continued through September 29 and brought to completion the investigations at that site. Russell Cave has contributed extensive information pertaining to Indian peoples who inhabited that area over a considerable period of time. Several cultural horizons are represented, the earliest of which is some $9,020 \pm 350$ years old on the basis of carbon-14 dating of charcoal from a hearth at that level. The first peoples apparently had a completely hunting-fishing economy and from that progressed through what is called the Archaic period to a more sedentary mode of life and became makers of pottery. The latter handicraft appeared at about 3500 B.C. The culture subsequently developed into what is known as the Early Woodland and continued through stages known as Middle and Late Woodland. It was during these three stages that agriculture became a part of their economy. The latest occupation seems to have been by Chickamauga Cherokee Indians in the early 1600's. During the 1958 season Mr. Miller reached the original and lowest floor in the cave, some 43 feet below the present floor. However, no evidence of occupation was found below the 37-foot level. During the course of the digging he found a fifth burial which helped to throw additional light on the mortuary customs of the people who inhabited the cave.

While in northern Alabama, Mr. Miller visited several other caves, also Indian sites in the open, and studied many local collections in order to correlate the cultural remains from Russell Cave with those of the surrounding areas, particularly those attributable to Early Man phases. Mr. Miller also spoke before different groups of people in Bridgeport and Huntsville, Ala., and in South Pittsburg, Richard City, and Tullahoma, Tenn. Following his return to Washington on October 4, Mr. Miller devoted his time to the preparation of reports. In November and December he attended meetings of the American Indian Ethnohistoric Conference and the American Anthropological Association in Washington, D.C., and was one of the speakers at the Southeastern Archeological Conference in Chapel Hill, N.C. Mr. Miller returned to duty on the River Basin Surveys staff December 14, 1958.

RIVER BASIN SURVEYS

The River Basin Surveys continued its program for salvage archeology in areas to be flooded or otherwise destroyed by the construction of large dams. These investigations were carried on in cooperation with the National Park Service and the Bureau of Reclamation of the Department of the Interior, the Corps of Engineers of the Department of the Army, and several State and local institutions. Dur-

ing the fiscal year 1958-59 the work of the River Basin Surveys was supported by a transfer of \$162,000 from the National Park Service to the Smithsonian Institution. Of that sum, \$137,000 was for use in the Missouri Basin and \$25,000 was for investigations along the Chattahoochee River in Alabama and Georgia. The Missouri Basin Project had a carryover of \$22,173 on July 1, 1958, and that, with the new appropriation, provided a total of \$159,173 for the program in that area. The grand total of funds available for the River Basin Surveys for 1958-59 was \$184,173.

Field investigations throughout the year consisted mainly of excavations, although some limited surveys were carried on. On July 1, 1958, 10 parties were in the field, all of them working in the Missouri Basin in South Dakota. Five of the parties were doing intensive digging in the Big Bend Reservoir area near Fort Thompson, four were excavating, and one was doing survey testing in the Oahe Reservoir area north of Pierre. Most of the field parties had returned to their headquarters at Lincoln, Nebr., by the end of August. Two small parties made brief investigations in the Merritt and Big Bend Reservoir areas during December and January. In February three parties began excavations and test excavations along the Chattahoochee River in Alabama-Georgia. The latter continued operations until late in June, when work was stopped and the men returned to their headquarters. Early in June a party from the Missouri Basin project headquarters began excavations in several sites in the construction area for the Big Bend Dam in South Dakota.

As of June 30, 1959, reservoir areas where archeological surveys had been made or excavations carried on since the beginning of field-work by the River Basin Surveys in the summer of 1946 totaled 254, located in 29 States. Two lock projects and four canal areas had also been examined. The survey parties have located 4,909 archeological sites, and of that number 1,017 have been recommended for excavation or limited testing. The term "excavation" in this respect does not imply the complete uncovering of a site, but rather digging only enough of it to obtain a good sample of the materials and information to be found there. While many of the locations are unquestionably of sufficient importance to warrant complete excavation, the needs of the salvage program make it impossible to conduct so extensive an investigation at any one location.

Preliminary appraisal reports have been issued for all the reservoir areas surveyed, with the exception of the three along the Chattahoochee River. The manuscripts of two of those reports have been completed and the third is well underway, so that all of them will be processed early in the coming fiscal year. The preliminary appraisal report for the Big Bend Reservoir area in South Dakota was mime-

ographed and distributed in October 1958. Since the start of the Inter-Agency Archeological Salvage Program, 185 appraisal reports have been issued. In a number of cases the information obtained from several reservoir projects located within a single basin or sub-basin have been combined in one report and for that reason there is a discrepancy between the number of reservoirs surveyed and that of the reports issued.

At the end of the fiscal year, 434 sites in 54 reservoir basins located in 19 different States had been either partially or extensively dug. In some reservoir areas only a single site was excavated, while in others a whole series was studied. At least one example of each type of site recommended by the preliminary surveys had been investigated. Where some of the larger and more complex types of village remains were involved, it was necessary to dig a number of somewhat similar sites in order to obtain full information about that particular phase of aboriginal culture. The sites investigated represent cultural complexes ranging from the early hunting peoples of approximately 10,000 years ago to early historic Indian village remains and frontier trading and army posts of European origin. Reports on the results obtained in some of the excavations have appeared in the Smithsonian Miscellaneous Collections, in Bulletins of the Bureau of American Ethnology, and in various scientific journals. During the year River Basin Surveys Papers Nos. 9 through 14, comprising Bulletin 166 of the Bureau of American Ethnology, were published and distributed. The papers consist of three reports on excavations in the Missouri Basin, one on digging in the Alatoona Reservoir in Georgia, one on investigations in six sites in the Jim Woodruff Reservoir basin in Florida, and one on historic sites in and adjacent to the Jim Woodruff Reservoir area in Florida-Georgia. The Missouri Basin reports were written by Paul L. Cooper, Robert B. Cumming, Jr., and Carlyle S. Smith and Roger T. Grange, Jr. Those pertaining to the Southeast were prepared by William H. Sears, Mark F. Boyd, and Ripley P. Bullen. River Basin Papers Nos. 15-21, which will constitute Bulletin No. 176 of the Bureau of American Ethnology, were sent to the printer in March. That series of papers pertains to studies in historic sites in the Fort Randall, Oahe, and Garrison Reservoir areas in South Dakota and North Dakota. Nine detailed technical reports were completed during the year and are ready for publication when the funds sufficient to cover their cost are available. In addition, the first and second drafts of seven technical reports were finished. The final drafts should be ready early in the next fiscal year.

As of June 30, 1959, the distribution of the reservoir projects that had been surveyed for archeological remains was as follows: Alabama, 4; Arkansas, 1; California, 20; Colorado, 24; Georgia, 8; Idaho,

11; Illinois, 2; Iowa, 3; Kansas, 10; Kentucky, 2; Louisiana, 2; Minnesota, 1; Mississippi, 1; Montana, 15; Nebraska, 28; New Mexico, 1; North Dakota, 13; Ohio, 2; Oklahoma, 7; Oregon, 27; Pennsylvania, 2; South Carolina, 1; South Dakota, 10; Tennessee, 4; Texas, 19; Virginia, 2; Washington, 11; West Virginia, 2; Wyoming, 22.

Excavations were made or were underway in reservoir basins in: Arkansas, 1; California, 5; Colorado, 1; Iowa, 1; Georgia, 7; Kansas, 5; Montana, 1; Nebraska, 1; New Mexico, 1; North Dakota, 4; Oklahoma, 2; Oregon, 4; South Carolina, 2; South Dakota, 4; Texas, 7; Virginia, 1; Washington, 4; West Virginia, 1; Wyoming, 2. Only the work of River Basin Surveys or that which was in direct cooperation between the Surveys and local institutions is included in the preceding figures. Investigations carried on under agreements between the National Park Service and State and local institutions have not been included because complete information about them is not available.

Throughout the year helpful cooperation was received from the National Park Service, the Bureau of Reclamation, Corps of Engineers and other Army personnel, and various State and local institutions. The Corps of Engineers provided transportation and guides for work in one of the reservoir areas and the Commanding Officer at Fort Benning in Georgia assigned certain Army personnel to assist in some of the investigations made in that portion of the Walter F. George Reservoir basin which lies in the Fort Benning Reservation. Helicopters were also furnished on several occasions to enable the archeologists to take aerial photographs of several sites in the reservoir area. In the Missouri Basin temporary headquarters and living accommodations were provided at several projects and storage space was made available so that much of the field equipment could be left at Pierre, S. Dak., during the winter months. The construction agency lent mechanical equipment in several instances to assist in heavy excavation and the backfilling of trenches and test pits. The various party leaders from the River Basin Surveys were given assistance by field personnel of all the agencies and the work was greatly expedited as a result. The National Park Service continued to serve as the liaison between the various agencies in the field as well as in Washington. The estimates and justifications for the funds needed to carry on the salvage program were also prepared by the Park Service. In Georgia the University of Georgia, the Georgia Historical Commission, and various local clubs and groups of citizens were particularly helpful to the parties working along the Chattahoochee River.

The main office in Washington continued general supervision of the program, while the field headquarters and laboratory at Lincoln, Nebr., was responsible for the activities in the Missouri Basin, and in addition provided equipment and office assistance for the parties engaged in the Chattahoochee River project. The materials collected by excavating parties in the Missouri Basin, as well as those from the Chattahoochee Basin, were processed at the Lincoln laboratory.

Washington office.—The main headquarters of the River Basin Surveys at the Bureau of American Ethnology continued under the direction of Dr. Frank H. H. Roberts, Jr. As previously mentioned, Carl F. Miller, archeologist, was detailed to the regular Bureau staff for the period July 3 to December 14, 1958. After his return to the River Basin Surveys staff, Mr. Miller completed the final revision of his report on the "Archeology of the John H. Kerr Reservoir, Southern Virginia and Northern North Carolina." The report includes a summary of the many sites located during the course of the original survey of the area, as well as detailed information on those which were excavated by Mr. Miller. After submitting the John H. Kerr report, Mr. Miller began work on the final report pertaining to the investigations that he made at the Hosterman site (38PO7) in the Oahe Reservoir area, South Dakota, during a previous field season. The report was approximately one-half complete at the end of the year. During the winter and spring months Mr. Miller spoke before several teachers' organizations in the Washington area, addressed a meeting of the Narragansett Archeological Society at Providence, R.I., the Archeological Society of Virginia in Richmond, and the Southern Branch of the Archeological Society of Maryland at Bethesda, Md. Most of his talks pertained to the Russell Cave explorations, although the one given at Bethesda compared the materials from the John H. Kerr Reservoir with those from the Shepard Barracks site in Maryland where excavations were carried on by the Maryland Society. In June, Mr. Miller read proof on an article about Russell Cave, which is to appear in a book on National Parks and Monuments in the United States being issued by the National Geographic Society. In January Mr. Miller received the Franklin L. Burr Award from the National Geographic Society in "recognition of his outstanding contributions to the science of geography and early American history through the archeological investigations of Russell Cave, Alabama." At the end of the fiscal year Mr. Miller was working in the Washington office.

On October 13, 1958, Harold A. Huscher was transferred from the Missouri Basin project to the Chattahoochee River project. He was under the general supervision of the Washington office but continued to work at the headquarters in Lincoln, Nebr., where he

completed reports on the surveys made during the previous year at the Oliver and Columbia Reservoir projects on the Chattahoochee River. He also virtually completed the first draft of his preliminary appraisal of the archeological explorations in the Walter F. George Reservoir area. In early February, Mr. Huscher returned to the Chattahoochee Basin and from then until late June carried on a series of investigations in the Columbia and Walter F. George Reservoir basins. While working in Alabama and Georgia, Mr. Huscher spoke before numerous clubs and local groups, took part in several radio broadcasts devoted to archeological problems along the Chattahoochee River, and appeared on several TV broadcasts. He returned to the field headquarters at Lincoln, Nebr., on June 30.

In February, Robert W. Neuman and G. Hubert Smith were transferred to the Chattahoochee River project and under general direction from the Washington office proceeded to that area. Mr. Neuman, during the period February 9 to June 23, carried on excavations in the vicinity of the Columbia Dam axis in Georgia and did test digging in one large mound on the Alabama side of the river. While in Georgia, Mr. Neuman spoke before various local clubs and groups of interested citizens. He also appeared on a TV interview pertaining to the salvage program and spoke before the Macon, Ga., Archeological Society. He returned to the field headquarters at Lincoln, Nebr., on June 27. Mr. Smith worked at two locations in the Walter F. George Reservoir area, one in Georgia and one in Alabama. He also talked before a number of local organizations. Mr. Smith returned to the field headquarters on June 17.

Alabama-Georgia.—During the period February through June a series of test excavations was carried on at a number of sites in the areas to be flooded by the Columbia Dam and Lock and the Walter F. George Dam and Lock. Robert W. Neuman worked in seven sites on the Georgia side of the Chattahoochee River in the vicinity of the Columbia Dam axis. Six of the sites dated from the Archaic period and extended into Middle Woodland times. The seventh site on the Georgia side represented a historic Creek occupation dating about A.D. 1830. A good collection of materials was obtained from all these sites and the specimens will aid materially in working out the cultural stages in that area. On the Alabama side of the river Mr. Neuman excavated in the remains of a large mound which was being destroyed by the river. Some work had been done there many years ago by Clarence W. Moore, but there was little information pertaining to the general character of the mound. Mr. Neuman obtained information relative to the method of its construction and several stages in its growth. Further work is contemplated at the site.

Harold A. Huscher carried on a series of excavations in four sites on the axis of the Columbia Dam $2\frac{1}{2}$ miles below Columbia, Ala. The area is one of extensive sandy bottoms and, with minor variations, the sites produce Weeden Island pottery types in the surface levels and to a depth of about 2 feet. There is also a scattering of Stallings Island potsherds, steatite fragments, and large heavy-stemmed projectile points down to about $4\frac{1}{2}$ feet below the surface. Some of the flint flakes and points from the deeper levels have been completely altered chemically to a chalky residue. Similar points were found previously on the Macon plateau by Dr. A. R. Kelley and were described by him in Anthropological Paper No. 1, which appeared in Bulletin 119 of the Bureau. Mr. Huscher made maps and detailed excavation plans for these sites.

Construction work was underway on the Walter F. George Dam in early February and Mr. Huscher made a series of 10- by 10-foot test excavations in three sites which were threatened with immediate damage. One of them at the Georgia end of the dam axis yielded a variety of trade goods, including the mechanism of a flintlock. The site probably represents the location of a Creek village of about A.D. 1800. Another site on the Georgia side, a short distance above the dam, and one on the Alabama end of the dam axis, produced plain Early Mississippian pottery. The material from the Alabama site indicated pottery with angled-loop handles similar to the ware that has been called Bibb Plain. The pottery from the Georgia site had flat strap handles with vertical incised decoration. The pottery characteristics are so definite that it is possible to correlate the wares with those from other sites in the general area.

Mr. Huscher later moved upstream and began the investigation of two sites on the Fort Benning Military Reservation. One of them on the Georgia side is an Early Lamar site and seems to contain a single "pure" component. The site had been destroyed to a large extent by Army bulldozers building a road, but trenches in two separate remnants revealed post-hole patterns that apparently represented two rectangular houses. A nearby midden area yielded a good representative sample of pottery types associated with the houses. The second site was on the Alabama side of the river just north of Uchee Creek. It is a Swift Creek-Weeden Island site and has an older underlying level. Sgt. David W. Chase, curator of the Infantry Museum at Fort Benning, Ga., had done some work there, and because of the evidence he had obtained, indicating that it would be a type site for the Swift Creek-Weeden Island phase of Middle Woodland in the area, it was extensively tested by the Huscher party. Beneath the Middle Woodland levels in a portion of the site there is a bed of white sand which has yielded fiber-tempered potsherds of

the Stallings Island type and fragments from steatite vessels. This stratigraphic evidence augments that found in other locations along the river. Sergeant Chase turned over to the River Basin Surveys party extensive notes and collections resulting from his previous work at both sites. He also assisted Mr. Huscher in making detailed plane-table maps of the sites and plans of the excavations.

G. Hubert Smith excavated in two historic sites in the Walter F. George Reservoir Basin. One of them on the Georgia side of the river was the location of the village of Roanoke, a colonial settlement that had originally been occupied by Creek Indians but was subsequently taken over by the whites who lived there from 1831 until the community was destroyed by Indians in May 1836. Because of the long period in which the area was under heavy cultivation, Mr. Smith was unable to determine the settlement pattern or to obtain outlines for any of the village structures. He did, however, obtain an extensive collection of specimens attributable both to the white occupation and that by the Indians. Careful study of the material may provide information that will be useful in dating some of the other late Indian sites along the river. From the Roanoke site Mr. Smith went to one on the Alabama side in Russell County, which was the location of a fort built and occupied by the Spaniards from 1689 to 1691. The fort known as Apalachicola was probably the most northern outpost of the Spanish occupation in the Southeast and was erected for the purpose of stemming the southward expansion of the English. The Spaniards possibly did not occupy the fort continuously, but lived at times in an adjacent Indian village. The fort was destroyed by the Spaniards to prevent its falling into the hands of English traders from the Carolinas who were operating among the Creek Indians. Mr. Smith did not dig in the fort proper but confined his investigations to the area immediately surrounding it in order to delimit the extent of the fortifications and to determine the proximity of Indian occupation. The fort remains will not be subjected to flooding by the Walter F. George Reservoir, but the maximum pool level will not be far distant and may damage the remains to some extent as a result of seepage. Consequently it is thought that a thorough study should be made of the site at a later date. Furthermore, associations between Spanish and Indian objects will provide a helpful checking point in establishing chronology of the area, particularly since the exact dates for the fort are known. After completing the investigations at the two sites, Mr. Smith assisted Mr. Huscher in making detailed plane-table maps and trench plans for both.

In addition to the test excavations described above, Mr. Huscher located and recorded 10 new sites in the Walter F. George and Columbia areas and made collections from 46 sites. At the end of the

season's work along the Chattahoochee, all the records and collections of the three field parties were sent to the laboratory of the River Basin Surveys at Lincoln, Nebr., for processing there and for use in the preparation of reports on the investigations.

The only other work by the River Basin Surveys pertaining to Georgia was that of Carl F. Miller, who completed a report on the test digging that he did during the previous year at the Tugaloo site in the Hartwell Reservoir area. However, the University of Georgia in cooperation with the National Park Service carried on a series of investigations in the Oliver Reservoir Basin and at the Standley Farm site, also known as Stark's Clay Landing, in the Walter F. George Reservoir on the Georgia side of the river. Work was continuing at the latter location at the end of the fiscal year.

Arkansas.—No fieldwork was carried on in Arkansas during the year ended June 30, 1959. However, a detailed technical report, "Archeological Investigations in the Dardanelle Reservoir Area of West-Central Arkansas," was completed by Dr. Warren W. Caldwell. The report consists of 85 typed pages, 2 maps, 8 plates, and 6 text figures. It will be published as a River Basin Surveys paper when printing funds for that purpose are available.

Kansas.—The only work done by the River Basin Surveys pertaining to Kansas during the fiscal year was the completion of a detailed technical report on the excavation of four sites in the Lovewell Reservoir area on White Rock Creek in Jewell County in the north-central part of the State. The report was written by Robert W. Neuman and is entitled, "Archeological Salvage Investigations in the Lovewell Reservoir Area, Kansas." It consists of 84 typed pages, 12 plates, and 3 text figures, and will be published as a River Basin Surveys paper.

The Kansas State Historical Society at Topeka carried on surveys and did some test digging in the Pomona and Melvern Reservoir areas under a cooperative agreement with the National Park Service. The Pomona Dam is to be built on the 110-Mile Creek, and Melvern Dam will be in the Marais de Cygnes River.

Missouri River Basin.—The Missouri Basin project continued to operate from the field headquarters and laboratory at 1517 O Street, Lincoln, Nebr. Dr. Robert L. Stephenson served as chief of the project throughout the year. Activities included work on all four phases of the salvage program: (1) Survey, (2) excavation, (3) analysis, and (4) reporting. Most of the effort during the summer months was directed toward the second phase, with only minor attention to the first phase. The third and fourth phases received the major attention in the winter months. The special chronology program, begun last fiscal year, was continued.

At the beginning of the fiscal year the permanent staff, in addition to the chief, consisted of six archeologists (one of whom was on loan to the National Park Service), one clerk-stenographer, one file clerk, one clerk-typist, one photographer, one illustrator, and four museum aides. Temporary employees included 1 archeologist, 1 physical anthropologist, 2 field assistants, 3 cooks, and 90 crewmen.

During the year, 1 archeologist was transferred to the staff from the Chattahoochee Project on July 21, 1 cook joined the temporary staff on July 9, and 16 temporary crewmen were added in July. During the last week of August and the first week of September, all temporary crewmen and three cooks were terminated, and one cook was transferred from that position to laboratory assistant. The temporary archeologist was terminated on September 12, and the two field assistants were terminated on August 29 and September 5, respectively. The physical anthropologist was terminated on September 2, and one museum aide was transferred from full time to half time on September 15. The archeologist on temporary-detached duty with the National Park Service returned to the permanent staff on October 1. One archeologist was transferred on October 13 to the Chattahoochee Basin project.

On September 23, one archeologist was assigned temporary-detached duty for 8 weeks with the National Park Service to conduct excavations at Fort Laramie National Monument, Wyo. He returned to the Missouri Basin project on November 15. On December 4, one archeologist was assigned temporary-detached duty for 3 weeks with the National Park Service to conduct excavations at George Washington Carver National Monument, Mo. He returned to the Missouri Basin project on December 21. On February 9, two archeologists were transferred for temporary duty with the Chattahoochee Basin Project. They returned to the Missouri Basin project on June 17 and 29, respectively. One museum aide resigned to take other employment on March 20, and one archeologist was permanently transferred to the National Park Service on May 30, to join the staff of the Wetherill Mesa Research project, Mesa Verde National Park, Colo. During June, six temporary crewmen were employed.

At the end of the fiscal year there were five archeologists, in addition to the chief, one administrative assistant, one clerk-stenographer, one file clerk, one clerk-typist, one illustrator, one photographer, and three museum aides on the permanent staff, and one laboratory assistant and six crewmen on the temporary staff.

During the year there were 14 Smithsonian Institution River Basin Surveys field parties at work within the Missouri Basin. Of the 14 Missouri Basin parties, 5 were at work in the Oahe Reservoir area during July and August, and 5 others were at work in the Big Bend

Reservoir during July and August. Two small parties were at work during December and January, respectively, in brief investigations in the Merritt and Big Bend Reservoir areas. One party was at work in the Big Bend Reservoir area and a second (mobile) party was working in the general Missouri Basin area in June.

Other fieldwork in the Missouri Basin during the year included 10 parties from State institutions operating under cooperative agreements with the National Park Service and in cooperation with the Smithsonian Institution in the Inter-Agency Archeological Salvage Program.

At the beginning of the fiscal year, in the Oahe Reservoir area, Dr. Robert L. Stephenson and a crew of 20 men were engaged in excavations at the Sully site (39SL4). This was the third and final season of work at this, the largest of the earth-lodge village sites in the Missouri Basin. The site was situated on the second terrace of the Missouri River, 21 miles above Pierre, in Sully County, S.Dak. The 1958 investigations were concentrated largely in the central and eastern portions of the site. These, with those of the two preceding seasons, provided a reasonably equal sample of features and specimens from all portions of the site. Excavation technique differed somewhat in the 1958 season. During the 1957 season, whole houses were excavated, but the surrounding areas outside were not examined. In 1958 only one house was excavated in this manner. In the other excavation units, only half houses were dug, but the surrounding areas on three sides of each house were also excavated. In this way portions of 19 houses were investigated, with most of the essential structural details obtained from all but two of them. Experience of the previous seasons' work at this site suggested that more could be learned of the total village pattern in this way, and that excavation of complete houses was neither necessary nor economically feasible. Besides the house areas, half of a ceremonial lodge, two large cache-pit areas, a scaffold area, a midden heap, and another portion of the "plaza" were also excavated, and two midden areas were tested. Thus all or parts of 32 of the nearly 400 houses have been excavated, as have been 3 of the 4 ceremonial lodges, a scaffold area, several cache-pit areas, midden heaps, and a "plaza." Numerous tests were made in an effort to locate a fortification ditch or stockade, but none was found.

Emphasis was placed, in the field, upon securing architectural information, and good superposition of varying types of dwelling houses was obtained. Two distinct, circular, dwelling-house types were present, one with a series of widely spaced large wall posts of an early period, and one with a series of small, closely set wall posts of a later period. There was considerable variation within each type. The earlier type had short entryways, while the later one had medium-

to-long entryways. The earlier houses were of rather uniform size (about 36 feet in diameter), while the later ones ranged from 19 feet to 47 feet in diameter. A unique feature was the presence of two concentrically superimposed ceremonial lodges, using almost the same floor level. One was 77 feet in diameter, superimposed upon one that was 64 feet in diameter. All the large ceremonial lodges excavated at the Sully site (as well as several of the later dwelling houses) were actually polyhedral rather than round, and had between 9 and 12 sides.

All occupations of this site were relatively late, with both major components (additional minor components have yet to be differentiated) in the circular-house tradition and probably relating to the period between roughly A.D. 1600 and 1750. The pottery sample and other artifact inventory is large and varied, but no assessment of it has been made at this time. This field party disbanded on August 23, after 10 weeks in the field.

The second River Basin Surveys field party in the Oahe Reservoir area consisted of a crew of eight men, under the leadership of William M. Bass III, physical anthropologist. This party devoted the major part of the season to excavations in the burial areas of the Sully site (39SL4). This was a continuation of work begun in 1957 on a somewhat smaller scale. Work was concentrated in three areas (Features 218, 219, and 220) and 161 burials were recovered, bringing the number of burials excavated at the Sully site to 224. Only a preliminary analysis of the skeletal remains has been made. Bodies were interred in shallow oval pits dug into an old surface about 1 foot below the current soil level. Burials were predominantly flexed or semiflexed and oriented with the head toward the west or northwest. A group burial, recovered from Feature 218, appears to be the remnant of a scaffold burial. Many of the graves had a covering of small poles, but few had grave goods included. The grave goods that were recovered included pottery vessels, ornaments, and an occasional catlinite pipe.

The Bass party, in addition to work at the Sully site, excavated nine rock-cairn burials at the Whistling Hawk site (39SL39), a rather ephemeral site on the same terrace 2 miles east of the Sully site. Burials were found in each cairn, but significant skeletal remains were scanty, as most of the bones were badly deteriorated. Artifacts with these burials were few.

At the end of the field season, the Bass party devoted a short period to the excavation and collection of a group of burials and associated artifacts from a site (39YK202) recently discovered in the course of U.S. Fish and Wildlife Service construction work near the Gavins Point Dam. Only the prompt action and complete cooperation

of the Commission, the local contractor, the Corps of Engineers, members of the Yankton College staff, the National Park Service, and the Smithsonian Institution made this salvage operation successful. The burials proved to be of a group of Woodland people and included an appreciable number of personal ornaments, as well as a good series of skeletal remains. This party disbanded on August 23, after 8 weeks in the field.

The third River Basin Surveys party in the Oahe Reservoir area at the beginning of the year was comprised of a crew of 10 men under the direction of Charles H. McNutt. This party conducted excavations at a series of sites in the Fielder Bottom-Telegraph Flat area near the Sully site. The work was a continuation of excavations begun the season before, designed to sample the smaller sites in the immediate vicinity of the Sully site, in order to round out the story of the prehistoric occupations of this once heavily populated area. At the Sully School site (39SL7), one house was excavated in its entirety, and portions of four more houses were exposed. Three test trenches were cut across the fortification ditch, and a large series of midden tests, cache pits, and subsidiary features were excavated. Because of the two seasons' work there the total artifact sample is extensive. The architectural information recovered is less satisfactory. The gumbo fill present in many of the features made it extremely difficult to determine structural characteristics. Two occupations were present, one represented by rectangular houses and pottery similar to that from the Thomas Riggs site, the other by circular houses and pottery in the La Roche tradition. Only part of the site was fortified. The rectangular-house occupation was confined within the fortification ditch, but the circular-house occupation was found both within and without the ditch. There is additional ceramic evidence that the fortification probably dates from the former, rather than from the latter, occupation.

The Ziltener site (39SL10) was located along a treeless cutbank of the Missouri River bottoms approximately 3 miles southeast of the Sully site. Informants had reported that a number of skulls and artifacts were eroded from the bank from time to time by the annual spring rises in the river. The bank was carefully watched for several seasons by River Basin Surveys parties, but with little success. In 1958 a storage pit and a house profile were visible, and a small cache was found where it had slumped from the cutbank. The remainder of the house and the storage pit were excavated. The house was circular, and the pottery of the La Roche tradition.

The Nolz site (39SL40) was located on a terrace remnant below and somewhat to the southwest of the Sully site. Three very faint house depressions were visible as surface features. Two of these

were trenched and the third was half excavated. Central hearths were found in all cases. Three additional tests were made on the site. Artifact recovery was fair, but architectural data were poorly represented, owing to the shallow depth of fill above house floors and the clayey nature of the soil. The houses were probably circular and the pottery in the La Roche tradition.

The Zimmerman site (39SL41), located on the same terrace as the Nolz site, consisted of a village area marked by about 40 large round-to-oval depressions. One rectangular house was excavated completely, and half the fill of a second was removed. A midden area and 12 cache pits were also excavated. There was no indication of the presence of any other component. Three exploratory trenches were dug, in an effort to find a fortification ditch, but no satisfactory ditch profile was discovered. The total data indicate that this was a single-component site, characterized by long-rectangular houses and Thomas Riggs pottery.

The Glasshoff site (39SL42) was situated on the Zimmerman-Nolz terrace below the west end of the Sully site. According to an informant, the area was once used for cavalry exercises by Fort Sully personnel. In the past, sherds were collected from the surface there, and one test excavation (1953) had provided additional evidence of aboriginal occupation. No well-defined house depressions were apparent, but several surface anomalies were visible. Wherever tested, they proved to be the result of activities attributable to the occupation of Fort Sully in the late 19th century. Trenching during the 1958 season yielded historic specimens, a cache pit, and a part of an aboriginal dwelling. The latter was found on the last day of the field season. Artifact recovery was fair, and although some architectural features were well preserved, few details were discernible. Pottery is simple-stamped and somewhat like the Thomas Riggs materials, but it appears to be a distinctive variant.

Site 39SL27, a large, unnamed site on Telegraph Flat, 1 mile east of the Sully site, has several visible but shallow "house" depressions. Three small pits dug in the centers of depressions yielded neither artifacts nor architectural features. Additional work is needed at this site.

The Whistling Hawk site (39SL39) comprised a large area along the edge of Telegraph Flat terrace, east of 39SL27. A single pit excavated into a deep (house?) depression yielded no artifacts or architecture, although the Bass party excavated rock-cairn burials at the site.

Two sites not situated in Fielder Bottom were also tested. Site 39SL19 was a low-lying area in the Little Bend region, 18 miles upstream from the Sully site. Two small, shallow pits were dug to

examine the fill, and the site was walked carefully. No indication of a village and no cultural material were found on the surface. This area will probably be flooded in 1959 and no further efforts there seem justified. The Pitlick site (39HU16), 8 miles downstream from the Sully site, is the northernmost site in the Peoria Bottom group. It will not be flooded in 1959, but will probably slump badly. Two large trenches and two deep test pits were excavated. One trench cut through the shoulder and floor of a house, the other through a fortification ditch. One of the deep test pits may have cut through a house floor. No artifacts were recovered at the site. This party disbanded on August 23, following 10 weeks in the field. The Stephenson, Bass, and McNutt field parties shared camp facilities near the Sully site in Fielder Bottom.

The fourth River Basin Surveys field party in the Oahe Reservoir area consisted of a crew of nine, directed by Richard P. Wheeler. It investigated a series of sites on the right bank of the Missouri River in the Fort Bennett area, 36 river miles above Pierre, Stanley County, S. Dak. The principal effort was directed toward excavations at the H. P. Thomas site (39ST12). A total of 60 circular earth-lodge depressions is apparent in area 1 of the site, and 21 depressions are suggested in area 2. Three lodges were excavated in area 1 and two in area 2. Overburden was removed from six additional lodges by bulldozer, and four dozer-cut trenches were carried across the moats in each area. Three midden deposits in area 1 were excavated, one containing a fragment of the floor pattern of a house. Three of the suggested five components appear to be assignable to the Snake Butte, Stanley, and Anderson-Monroe Foci, as defined by Lehmer for the Oahe Dam area.

At the Agency Creek site (39ST41), adjacent to site 39ST12, seven small test pits and one bulldozer trench were excavated. Since time did not permit detailed investigation of these sample excavations, little can be said of the cultural implications of the site, although laboratory analyses of the artifacts will prove informative. Additional tests were made at the Lounsbury site (39ST42) and at the Ramsey site (39ST236), the latter situated midway between 39ST41 and 39ST42. At the Lounsbury site, test pits were excavated into the centers of two circular-house depressions, exposing the central hearths. The overburden was bulldozed from the surface of one house, but the structure was not fully excavated. The Ramsey site appears to be a series of middens only, and a stratigraphic cut, 5 feet by 10 feet, provided an abundance of artifacts but no house remains. These test excavations at the Agency Creek, Lounsbury, and Ramsey sites yielded thin, horizontally incised rim sherds and simple-stamped body sherds characteristic of the Bennett Focus as suggested earlier



1. Seminole settlement in the Everglades.



2. Digging up edible roots of elephant-ear (*Xanthosoma* sp.), a plant cultivated by the Seminole.



1. Aerial view of a Seminole field in the Everglades.



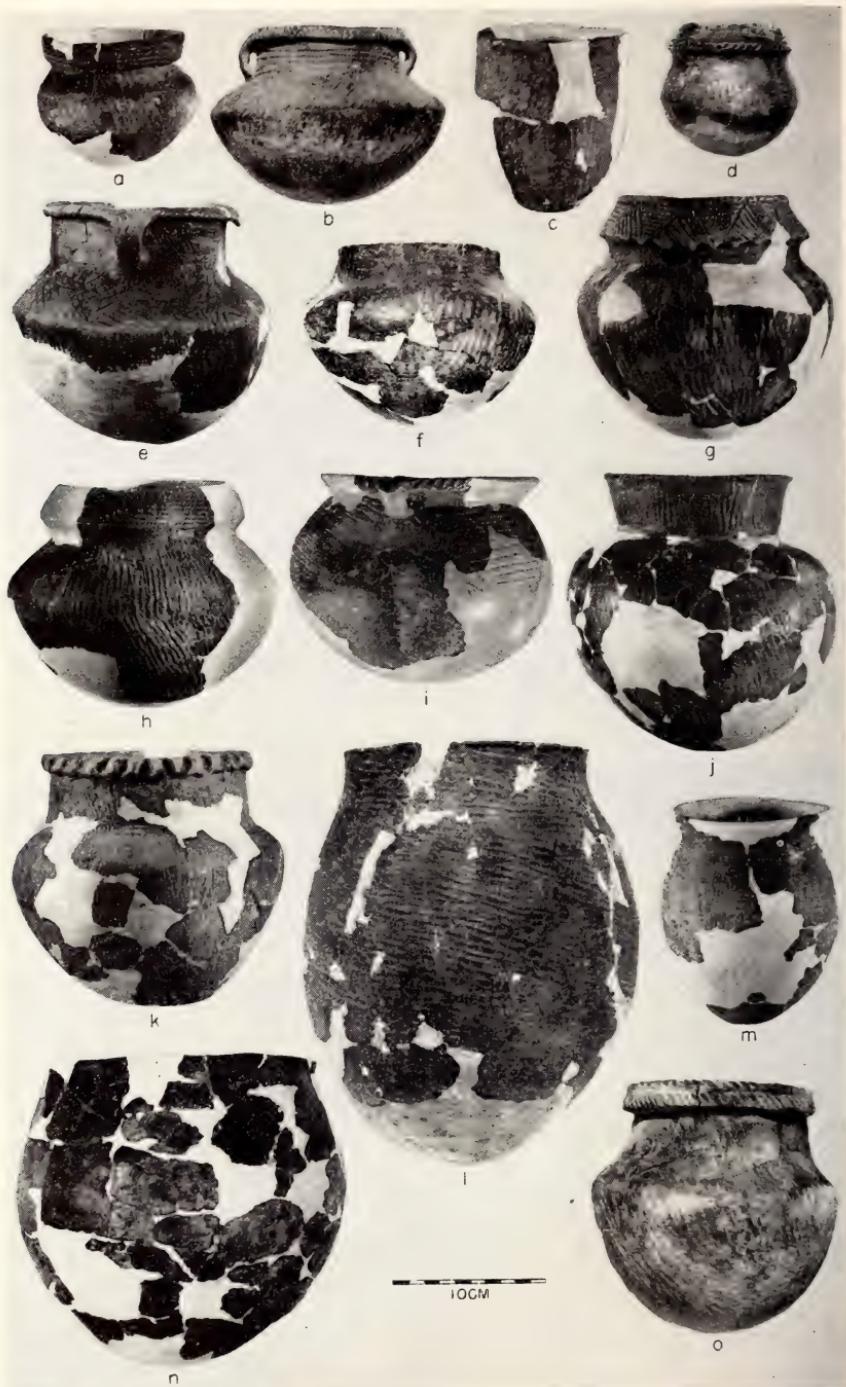
2. Corn growing in a Seminole field in the Big Cypress Swamp.



1. Excavation of Feature 1, a portion of a circular house exposed in slump bank along Missouri River at the Ziltener Site (39SL10) in the Oahe Reservoir area, South Dakota. Most of the house had washed away but the remainder was undisturbed, with a fair floor and post holes dug into soft silt. River Basin Surveys.



2. Crew excavating remains at the Truman Mound Site (39BF224), a group of six burial mounds of the pre-earth-lodge peoples in the Big Bend Reservoir area, South Dakota. River Basin Surveys.



(See legend on opposite page.)

PLATE 4

Representative examples of pottery vessels from various sites in the Missouri Basin.

- (a) From site 25FT17, an Aksarben Aspect site in Medicine Creek Reservoir, Nebraska.
- (b) From Leavitt Site (39ST215), Oahe Reservoir, South Dakota. (c) From White Swan Mound Site (39CH9), a Woodland Site in Fort Randall Reservoir, South Dakota. (d) From Leavitt Site (39ST215). (e) Stanley Tool Impressed vessel from Phillips Ranch Site (39ST14), Oahe Reservoir. (f) From Leavitt Site (39ST215). (g) Colombe Collared Rim vessel from Phillips Ranch Site (39ST14). (h) Foreman Cord Impressed vessel from Dodd Site (39ST30), Oahe Reservoir. (i) Mitchell Broad Trailed vessel from Dodd Site (39ST30). (j) From Cheyenne River Site (39ST1), Oahe Reservoir. (k) Stanley Braced Rim vessel from Dodd Site (39ST30). (l) Truman Plain Rim vessel from Truman Mounds Site (39BF224), Big Bend Reservoir, South Dakota. (m) From White Swan Mound Site (39CH9). (n) From Site (48FR84), Boysen Reservoir, Wyoming. Only known restored vessel from Wyoming. (o) From Leavitt Site (39ST215).

at the Black Widow (39ST3) and Meyers (39ST10) sites. This party disbanded on August 25 and returned to the headquarters in Lincoln after 10 weeks in the field.

The fifth River Basin Surveys field party in the Oahe Reservoir area began work on July 25. It consisted of Harold A. Huscher and a crew of two men and worked primarily on the left bank of the Missouri River in Stanley County, S. Dak. This survey-mapping-testing crew investigated a series of six sites along Black Widow Ridge, 3 to 6 miles above the H. P. Thomas site, mapping and testing each. They are sites 39ST25, 39ST50, 39ST3 (Black Widow), 39ST49, 39ST203, and 39ST201. The Huscher party mapped all four sites being excavated by the Wheeler party, 39ST12, 39ST41, 39ST42, and 39ST236, and mapped and tested three other sites some 10 miles below the H. P. Thomas site. These are sites 39ST37, 39ST38, and 39ST39. In addition, this party mapped and assisted the McNutt crew in testing the Pitlick site (39HU16) on the left bank of the Missouri River. Huscher was severely injured in a fall from a photographic ladder on August 24, thus terminating the work of this field party after 4 weeks in the field. Following 5½ weeks in the hospital and another month of recuperation, he returned to duty on October 13. The Wheeler and Huscher parties shared a joint field camp near Fort Bennett.

In the Big Bend Reservoir area there were five River Basin Surveys field parties at work at the beginning of the fiscal year. The first consisted of a crew of 12 men under the direction of William N. Irving and included an assistant trained in geology to aid in investigations of stratigraphic terrace sequences relating to the geological-archeological interpretations of the sites and their immediate vicinity. This party concentrated its efforts on the excavation of the early occupations of the Medicine Crow site (39BF2), begun last season, and other preceramic sites in the immediate vicinity. These sites are located near Old Fort Thompson on the left bank of the Missouri River, in or near the construction area of the Big Bend Dam, Buffalo County, S. Dak. At the Medicine Crow site, three major occupation zones, each containing two or more components, are distinguishable on the basis of the vertical distribution of point types within a 3- to 6-foot section of primarily aeolian silt. The basal section of a small fluted point was found in the lowermost occupation zone. From the same zone, however, came points that resemble those of the Frontier Complex, and others suggesting a long temporal range for the basal portion of the deposit.

Additional investigations were made at two sites, 39BF238 and 39BF250, that had not been recorded previously, and at the Aiken site (39BF215). Only at the latter were immediately significant re-

sults obtained. Limited excavations there indicated five occupational layers and two well-defined, buried soils. At least two ceramic horizons are present, in the upper levels, one with simple-stamped or plain pottery, the other with cord-marked body sherds. Several additional occupations, in stratigraphically earlier positions, have yielded neither pottery nor other diagnostic artifacts. The great depth of deposit and the presence of buried soils may make possible a considerable refinement in the stratigraphy of late preceramic remains in the Big Bend Reservoir area. Geological investigations carried on by Alan H. Coogan in the area of the lower portion of this reservoir were intended to obtain information bearing upon chronology and the environmental sequence of the Medicine Crow, Aiken, and other early sites in the area. The possibilities for correlation of terrace, moraine, and other depositional features appear to be excellent. The Irving party disbanded on September 4 and returned to the Lincoln headquarters after 13 weeks in the field.

The second River Basin Surveys party in the field in the Big Bend Reservoir area was a crew of 11 men under the direction of James J. F. Deetz. This party spent the entire season in excavation of the late (village occupation) components (areas B and C) of the Medicine Crow site (39BF2). The work was done in conjunction with that of the Irving party in an effort to provide a comprehensive picture of the site as a whole. In all, 16 houses were completely excavated, and 4 were tested with varying intensity. Included within the houses were 16 cache pits. Eleven cache pits were excavated in the interhouse living areas. A single burial was recovered. Three well-defined components have been established for the ceramic period of this site and a fourth, less adequately outlined component is proposed. The Stanley Component (latest) is characterized by a predominance of Stanley Braced Rim pottery; circular houses, 25 to 30 feet in diameter with hard, light-colored floors; mortar pits; and absence of interior cache pits. Five domestic and four specialized house structures are included in this component. The specialized houses were grouped about a "plaza" and included a ceremonial lodge, 50 feet in diameter, with an altar, plastered floor, and silled entrance. The Fort Thompson Component resembles that at the Oacoma site, but may be somewhat later. Talking Crow ware predominates. Houses range from 35 to 40 feet in diameter, have vaguely defined floors, in-floor caches, and lack mortar pits. Four such structures were excavated during the 1958 season. There were two cases of superimposition, with Stanley houses above Fort Thompson houses. A third, unnamed, component is represented by a series of large bell-shaped cache pits excavated in area C. These affiliate most closely with the Two Teeth site (39BF204) a short distance to the southeast. Talking

Crow Straight Rim pottery predominates. The fourth component, occurring in area A, is represented by a house with an indistinct post pattern buried in Stanley and Fort Thompson refuse. The associated ceramics are varied, and at this time no definite assessment can be made of them.

The investigations in areas A and C at the Medicine Crow site represent the first clear-cut Stanley occupation excavated south of the Oahe Reservoir. It is also important to note that a temporal relationship can now be established between the components involved. European trade materials found in association with Stanley features may be helpful in providing absolute dates for the latest occupation. The Deetz party terminated fieldwork on August 30 after 12 weeks in the field.

The third River Basin Surveys party in the Big Bend Reservoir was comprised of a crew of 10 men, under the leadership of Robert W. Neuman. This party excavated or tested a series of four sites in the vicinity of Old Fort Thompson and three sites on the right bank of the Missouri River, in and adjacent to Good Soldier and Counselor Creeks. All seven sites are within the dam-construction area. The initial effort was devoted to the Akichita site (39BF221) located in the Missouri River bottoms adjacent to Old Fort Thompson. The site had been tested during the 1957 season, but although extensive evidence of occupation was recovered, no house structures were found. A network of five extended test trenches, excavated during the 1958 season, was equally unsuccessful in locating habitations. Cache pits were the only structures uncovered. The artifact collection is extensive, and shows clear relationship to the Anderson-Monroe material from the Dodd site (39ST30) near Pierre, S.Dak. At site 39BF220, situated about 1 mile west of the Akichita site, much of the occupation area has been washed into the river. Two excavation units, each 30 feet by 50 feet, produced only a limited artifact return. However, a number of pottery types were recovered. The inventory suggests that the site was occupied by circular-house people.

The Truman Mound site (39BF224), also in the Old Fort Thompson area, on the first terrace overlooking the river, was revisited for a second season in order to excavate the remaining two of the six mounds originally present there. The mounds, 1 to 2 feet in height, 50 feet in diameter, contained two types of burials: (1) secondary interments in shallow circular pits, (2) primary burials in deep oval pits. Artifact material recovered from the site suggests Woodland affiliation, but the conical-shaped vessels excavated are clearly simple-stamped, rather than the Woodland cord-marked type. In a stratum beneath, and not associated with the mounds, excavations recovered a number of stone artifacts. The most diagnostic type is represented by a tri-

angular point with a concave base. In the same stratum were ovoid knives, crude scrapers, a long-stemmed drill, hand-size cobbles, and fragments of bison bone. No pottery was in association. Site 39BF270, located about 2 miles west of 39BF224, consisted of four low circular mounds, three of which were excavated. The recovered artifacts compare closely with those from the Truman Mound site.

At site 39LM238, on the west side of the Missouri at the mouth of Good Soldier Creek, where the west abutment of the dam is to be built, a large "mound" was extensively cross-trenched and a series of test pits were excavated in an effort to locate village remains. The "mound" proved to be of natural origin (165 feet long, 90 feet wide, 5 feet high) but capped by two occupational deposits separated stratigraphically by a stratum of sterile yellow silt. The upper component contained simple-stamped pottery, triangular points, scattered post molds (many with bone wedges), and a few shallow firepits. The lower component contained cord-paddled pottery, large side-notched points, shallow basin-shaped firepits, and a large rock-filled hearth. A small rock shelter (39LM239), located about a mile and a half upstream from Good Soldier Creek, was briefly tested. It was thought that this site might possibly be the "Truteau Cave," historically known to have been used as winter quarters by the trader Truteau in 1794. Excavation demonstrated the shelter to be sterile of any cultural material. Site 39LM6, a deeply buried, multicomponent village site at the mouth of Counselor Creek, 3 miles upstream from site 39LM238, was visited, and an eroding cache pit excavated. Some additional collecting was done, but no further excavation was attempted. The Neuman party terminated fieldwork on August 22, after 14 weeks in the field. The Neuman, Irving, and Deez parties shared camp facilities near the Brule Landing, 5 miles upstream from Old Fort Thompson.

A fourth River Basin Surveys field party in the Big Bend Reservoir area consisted of nine men, directed by Bernard Golden. This party conducted excavations at the Hickey Brothers site (39LM4), located on the right (west) side of the Missouri River, about 7 miles north of the Lower Brule Agency. The site is situated on the first terrace above the river, just north of the constricted neck of the Little Bend. The occupation area is delineated by a well-preserved fortification ditch. The latter is "coffin shaped" in plan, with bastions at the corners and in the intervening runs of wall. A single corner bastion was excavated, exposing a shallow moat backed by a pendulum loop of stockade posts. The stockade line was further verified along one of the long walls, and a series of 25 test pits was excavated to sample the body of the site. Four of the shallow "house" depressions within the fortification were tested by area excavation and trenching.

Results were limited. A relatively constant stratigraphy was revealed, but no aboriginal habitations were located with certainty. At least one hearth and other evidences of very localized "camp" areas were excavated, but artifacts were remarkably scarce. A limited number of potsherds (Stanley, Thomas Riggs) constitute the most distinctive material. A portion of the site had been disturbed by recent farming activities, but at best it does not seem to have been heavily occupied. This crew terminated fieldwork on August 20, after 10 weeks in the field.

The fifth River Basin Surveys field party in the Big Bend Reservoir area had a crew of 14 men under the leadership of Dr. Warren W. Caldwell. Work of this party consisted of excavations at two sites immediately to the south of the Hickey Brothers site, on the first terrace of the Missouri River. The major portion of the season was devoted to continuing excavations begun in the 1957 season at the Black Partizan site (39LM218), a large multicomponent earth-lodge village, situated one-fourth mile south of the Hickey Brothers site. Four houses within the fortification ditch were exposed. In addition, deep cross sections of the moat were cut at two places, and two extensive midden areas were sampled by trenching. Several differing house patterns were recovered. The most distinctive consisted of a small (18-foot diameter) square(?) house with rounded corners, large intramural cache pits, and a dearth of house posts. Thomas Riggs pottery was characteristic. Two circular houses were exposed, one 35 feet in diameter, the other 29 feet in diameter. The larger, containing many bone and stone-wedged post holes, overlay a large rectangular house. Associated cache pits are probably attributable to the latter structure rather than to the former. Braced rims and typical Thomas Riggs rims are both present. The smaller circular house was characterized by an abnormally large group of in-floor cache pits. The pottery sample is varied and much of it may predate the house.

The deep midden debris overlying much of the site contained pottery rim sherds with horizontal trailed or incised decoration. Beneath the midden, a series of large cache pits produced an abundance of Talking Crow pottery. The fortification ditch varies from 12 to 15 feet in width and from 4 to 6 feet in depth, and contains both water-deposited silt and midden fill. The latter normally contains cord-marked body sherds and a scattering of mammal bone.

At site 39M215, lying between the Black Partizan and the Hickey Brothers sites, only a single house was excavated. Site 39LM215 physically overlaps both of the latter sites. The two houses dug at 39LM218 in 1957 appear to be associated with it. The single structure excavated this year was characterized by Talking Crow

pottery and an abundance of sheet-copper fragments. This party broke camp and returned to the Lincoln headquarters on August 12, after 9 weeks in the field. The Caldwell and Golden parties shared a joint field camp, situated adjacent to the sites under excavation.

The practice of using joint field camps of two or three parties each has, in the past two seasons, proved very economical and efficient. Combining of activities and expenses of several parties and the consequent reduction in total quantity of field equipment, vehicles, number of cooks, and other expenses constitute a major saving. Having several archeologists in a single camp is of great help in discussions pertaining to excavation methods and general archeological interpretations.

During the winter months two very brief Missouri Basin project field parties were at work in the Missouri Basin. William N. Irving visited the Merritt Reservoir area and the nearby vicinity in north-central Nebraska from December 2 through December 7. This one-man party made extensive examinations of a number of the small Sandhills lakes for possible localities in which to collect fossil pollen. This was in connection with building a master pollen profile which will aid in interpreting the archeological sequences at sites in the Big Bend Reservoir and other reservoir areas in the central portion of the Missouri Basin. A second purpose of the trip was to determine whether recent construction activity in the Merritt Reservoir area was endangering any previously unknown archeological remains. The potentialities for collecting fossil pollen looked very favorable, but actual collecting had to await colder weather when the lakes would be frozen over. No new archeological material that would be disturbed by work within the Merritt Reservoir area was noted.

The second wintertime River Basin Surveys field party within the Missouri Basin consisted of William N. Irving and Lee G. Madison, who were in the field from January 19 through the 30th. This party was accompanied by Dr. Paul B. Sears, pollen specialist from Yale University, who kindly volunteered his services in order to assist in this important aspect of the salvage program. The group visited the vicinity of the Big Bend Reservoir area and collected an extensive series of pond-deposit samples for pollen analysis. Dr. Sears has kindly agreed to analyze these samples for fossil pollen, and in fact has already begun such analyses. At least one core sample has provided a long pollen sequence, and others look promising. If a master profile can be established from these and other samples, it will assist greatly in identifying the vegetations and climates of past ages. By superimposing the pollen samples from archeological sites excavated in the Big Bend and other related reservoir areas upon this master pollen profile, climatic and ecological contexts can be determined for

these sites and the age of the sites thus be correlated with the climatic changes. Details of ecology are thereby added to the archeological records salvaged from the reservoir to provide a fuller picture of the prehistory of the area.

The 1959 summer field season in the Missouri Basin began in the Big Bend Reservoir area on June 4 with a single small crew, encamped near the Hickey Brothers site on the right bank of the Missouri River in Lyman County. Dr. Warren W. Caldwell and a crew of six began work on a series of sites at and near the proposed right (west) abutment of the Big Bend Dam, near the mouths of Good Soldier Creek and Counselor Creek. On Good Soldier Creek, site 39LM235 was found to have been largely destroyed by construction during the winter of several small boat-landing ramps, but test pits were excavated in the remaining portion of the site. Very little material was recovered. The nearby site, 39LM236, was found to be completely inundated by an unusually high water level in the Fort Randall Reservoir and no work was possible. At the mouth of Counselor Creek, the Useful Heart site (39LM6) was extensively trenched and full-scale excavation of this earth-lodge village site was in progress at the end of the year.

The only other Missouri Basin project party at work in June was a team of physical anthropologists consisting of William M. Bass, III, and two assistants. This team, working out of the Lincoln office, began operations on June 17 at the Department of Anthropology, University of Nebraska, making metric analyses of a large group of human skeletal remains from several reservoir areas in the Missouri Basin, and from other sites in the area. The team spent 5 days on a trip to the University of Oklahoma at Norman to make similar analyses, and at the end of the fiscal year was back in Lincoln studying the skeletal remains from sites in the Oahe Reservoir area. This party was materially assisted by a grant-in-aid to Bass from the University of Pennsylvania, Child Growth and Development Center, through the kindness of Dr. Wilton K. Krogman. This grant provided the salary for Bass and one assistant during June.

Cooperating institutions at work in the Missouri Basin at the beginning of the fiscal year included a party from the University of South Dakota, directed by Eugene B. Fugle, excavating at the Four Bears site (39DW2) in the Oahe Reservoir area; a party from the University of Idaho, directed by Dr. Alfred E. Bowers, excavating for the second season at the Rygh site (39CA4) in the Oahe Reservoir area; a joint party from the University of North Dakota and the State Historical Society of North Dakota, under the direction of Dr. James H. Howard, excavating at the Tony Glas site (32EM3) in the Oahe Reservoir area; a party from the University of Wyoming,

directed by Dr. William Mulloy, excavating at a series of sites in the Glendo Reservoir in Platte County, Wyo.; and a party from the University of Missouri, directed by Carl Chapman, in the Pomme de Terre Reservoir area of west-central Missouri. At the end of the fiscal year cooperating institutions were: A party from the University of Kansas, directed by Dr. Carlyle S. Smith, excavating at the Stricker Village site (39LM1) in the Big Bend Reservoir; a joint party from the University of North Dakota and the State Historical Society of North Dakota, directed by Dr. James H. Howard, excavating at the Huff site (32MO11) in the Oahe Reservoir area; and two parties from the University of Missouri, directed by Carl F. Chapman, excavating at a series of sites in the Pomme de Terre Reservoir and making preliminary surveys in the Kassinger Bluff Reservoir area of west-central Missouri. All these parties were operating through agreements with the National Park Service and were cooperating in the Smithsonian Institution research program.

During the time that the archeologists were not in the field, they were engaged in analyses of their materials and in laboratory and library research. They also prepared manuscripts of technical scientific reports and wrote articles and papers of a more popular nature.

The Missouri Basin Chronology Program, begun by the staff archeologists of the Missouri Basin project in January 1958, continued to function throughout the current year. This is a cooperative program, bringing together the enthusiastic support and wide range of experience of 34 individuals representing 20 research institutions working in the Missouri Basin area. This program, directed toward a more precise understanding of time sequences of the prehistoric cultures represented by the sites being excavated, is already beginning to be useful in more efficient planning of salvage operations. Concrete results are being realized with a minimum expenditure of time and funds. The program includes intensive research in dendrochronology, and in this phase the field crews have collected wood specimens to be used in developing two master charts, one for the lower Big Bend Reservoir area and one for the lower Oahe Reservoir area. Sufficient wood is now on hand to begin preparing the master charts into which archeological wood samples may later be fitted. In addition, plans are in progress for the services of a full-time dendrochronologist, working on other funds, to concentrate his efforts on this problem. Research in radioactive carbon-14 analyses is well underway within the framework of the program, and 11 specimens have been submitted to the University of Michigan Memorial-Phoenix Project Laboratory under the direction of Prof. H. R. Crane. Dates have been returned on all 11, and a second series of specimens is being prepared for submission. Pollen samples have been collected and are being analyzed by Dr. Paul B. Sears of Yale University.

Others have already been analyzed by Mrs. Catherine Clisby of Oberlin College, preparatory to establishing a fossil pollen sequence. Geologic-climatic investigations have been carried out by Alan H. Coogan, who was employed for the purpose by the River Basin Surveys. He worked in collaboration with William N. Irving in the lower Big Bend Reservoir area. Other less specific researches are in progress to bring all possible chronology techniques to bear on this one basic framework for Missouri Basin chronology.

The laboratory and office staff devoted its full time during the year to processing specimen materials for study, photographing specimens, preparing specimen records, and typing and filing of records and manuscript materials. The accomplishments of the laboratory and office staff are listed in the following tables:

TABLE 1.—*Specimens processed July 1, 1958, through June 30, 1959*

Reservoir	Number of sites	Catalog numbers assigned	Number of specimens processed
Big Bend	50	9, 254	71, 281
Dardanelle ¹	13	1, 975	4, 461
Fort Randall	4	21	512
Glendo	2	10	48
Lewis and Clark	1	7	158
Oahe	25	8, 668	80, 311
Sites not in reservoirs	3	48	194
Collections not assigned site numbers		98	19, 983
		5	17
		103	20, 000
			157, 048

In the Arkansas Basin.

TABLE 2.—*Record materials processed July 1, 1958, through June 30, 1959*

Reflex copies of records	8, 968
Photographic negatives made	2, 792
Photographic prints made	11, 888
Photographic prints mounted and filed	5, 566
Plate layouts made for manuscripts	71
Transparencies mounted in glass	1, 108
Cartographic tracings and revisions	72
Color pictures taken in lab	434
Artifacts drawn	66
Lettering of plates	75
Profiles drawn	45

It is of especial interest to note that on January 22 the one-millionth specimen was processed by the Missouri Basin project laboratory. As of June 30, the Missouri Basin project had cataloged, in 13 years of

operation, a grand total of 1,074,418 specimens from 1,795 numbered sites and 54 collections not assigned site numbers, in 92 reservoir areas within the Missouri Basin. During the current fiscal year, 7 pottery vessels, 23 pottery vessel sections, and 1 stoneware bowl were restored, and 154 nonvessel artifacts were repaired. Archeological specimens from 3 sites in 2 reservoirs were transferred to the division of archeology, U.S. National Museum, and human skeletal remains from 26 sites in 8 reservoirs were transferred to the division of physical anthropology, U.S. National Museum. Archeological specimens (mostly trade goods) from three sites in one reservoir were transferred to the Region Two Office, National Park Service, for display at the Jefferson National Westward Expansion Memorial Museum in St. Louis, Mo. The Missouri Basin project received, by transfer, from the University of Kansas, through the courtesy of Dr. Carlyle S. Smith, sample rim sherds of the Campbell Creek Indented type from the Talking Crow site (39BF3), and sample rim sherds of three varieties of the Cadotte Collared type from the Two Teeth site (39BF204). These specimens have been added to the Missouri Basin project comparative collections.

On July 26-27, archeologists of the staff of the Missouri Basin project joined with archeologists of the National Park Service and of State agencies at work within the Missouri Basin in a roundtable field conference in Pierre, S. Dak. This session, called the 15½th Plains Conference, was devoted to basic technical problems arising from the current field activities, and such conferences are to become a regular feature each summer. During the Thanksgiving weekend, members of the staff participated in the 16th Plains Conference for Archeology, held in Lincoln. On April 17, members of the staff participated in the annual meeting of the Nebraska Academy of Sciences, also held in Lincoln. On April 30 and May 1 and 2, members of the staff attended and participated in the annual meeting of the Society for American Archaeology, held in Salt Lake City, Utah.

Dr. Robert L. Stephenson, chief, when not in charge of field parties, devoted most of his time to managing the office and laboratory in Lincoln and preparing plans and budgets for the 1959 summer field season. He spent a portion of his time working on a summary report of the Missouri Basin Salvage Program for the calendar years 1952-58 and on the preparation of a manuscript reporting the "Archeological Investigations in the Whitney Reservoir, Texas." He completely revised and submitted a manuscript, "Excavations at Pueblo Pardo, New Mexico," which he had prepared in collaboration with Joseph H. Toulouse, Jr., in 1941, for publication as a monograph of the School of American Research, Santa Fe, N. Mex. He prepared and submitted for publication by the Alice Ferguson Foundation of

Washington, D.C., a popular manuscript, "Prehistoric Peoples of Accokeek Creek." Throughout the year he served as chairman of the Missouri Basin Chronology Program. A photographic booklet, "The Inter-Agency Archaeological Salvage Program after Twelve Years," prepared by him at the end of last fiscal year, was published in September. In July he served as chairman of the 15½th Plains Conference held in Pierre, S. Dak. During the Thanksgiving weekend he attended and participated in the 16th Plains Conference for Archeology, serving as chairman for the half-day session on "Archeology of the Southern Plains," and presenting a paper on "The Sully Site" at another session. In January he attended and participated in the annual meeting of the Committee for the Recovery of Archaeological Remains, held in Washington, D.C. In April he attended the annual meeting of the Nebraska Academy of Sciences, presenting a paper on "Administration in Anthropology" which was published in abstract in the *Proceedings of the Nebraska Academy of Sciences*. On April 30 and May 1-2, he attended the annual meeting of the Society for American Archaeology and presented two papers, "River Basin Salvage Problems Today" and "The Missouri Basin Chronology Program," both of which were published in abstract in Abstracts of Papers of the 24th Annual Meeting of the Society for American Archaeology. During the year he gave eight talks on various aspects of Missouri Basin Salvage Archeology at five local organizations' regular meetings.

Dr. Warren W. Caldwell, archeologist, during the fall and winter months devoted most of his time to analyses of specimen materials recovered from sites he had excavated in the Dardanelle and Big Bend Reservoirs during the previous year. He completed all plates, figures, and manuscript text for the final report, "Archeological Investigations in the Dardanelle Reservoir of West-Central Arkansas." He prepared a brief technical report on "Firearms and Related Artifacts from Fort Atkinson, Nebraska" and another entitled "Comments on the 'English Pattern' Trade Rifles," both for publication in the *Missouri Archaeologist*. He prepared a manuscript, pictures, and captions for a photographic booklet entitled "Gavins Point Dam and the Lewis and Clark Lake" for publication by the Corps of Engineers, U.S. Department of the Army; and submitted for publication in the *Tree-Ring Journal*, an article entitled "Dendrochronology and the Missouri Basin Chronology Program." He prepared a statement on "Plains Archeology and the Salvage Program" for publication in the *Encyclopaedia Britannica Yearbook*. In addition, he prepared several mimeographed statements for distribution from the Missouri Basin project office, including "Report No. 3, Missouri Basin Project and Cooperating Institutions," and

"Statement No. 2, The Missouri Basin Chronology Program." His article "The Smithsonian Institution in Arkansas," prepared late last year, was published in the *Ozark Mountaineer* for July 1958. He prepared a book review of "Frontier Steel" by Arthur Rosebush, that was published in *Nebraska History* for March 1959. In July he attended and participated in the 15½th Plains Conference, held in Pierre, S. Dak. In November he attended the 16th Plains Conference for Archeology and served as chairman for the half-day session on "The Chronology Program" and presented a paper on "The Black Partizan Site" at another session. In April he served as the general chairman of the annual meeting of the anthropology section of the Nebraska Academy of Sciences, held in Lincoln, Nebr., and presented a paper entitled "Northwest Coast Archeology: An Interpretation," which was published in abstract in the *Proceedings of the Nebraska Academy of Sciences*. During the year he served as chairman of the dendrochronology section of the Chronology Program and gave a talk to the North Omaha Kiwanis Club on "The Missouri Basin Salvage Program."

Harold A. Huscher in July participated in the 15½th Plains Conference in Pierre, S. Dak., and in November attended the 16th Plains Conference for Archeology, where he served as chairman for the half-day session on "Field Reports" and presented two papers entitled "Mapping in the Fort Bennett Area" and "Chronologies from Ceramic Analysis." His other activities have been reported in a preceding section.

William M. Bass, III, temporary physical anthropologist, participated in the 15½th Plains Conference in July and after the completion of fieldwork, left the staff on September 2. During the spring months he devoted much of his own time to detailed metric analyses of the human skeletal remains excavated in the Oahe and other Missouri Basin reservoirs. On June 17 he returned to Lincoln to serve as party chief for the mobile physical anthropology team working in the general Missouri Basin area.

William N. Irving, archeologist, when not in the field directing excavations, was in the Lincoln office analyzing materials he excavated during the previous two summers, particularly in regard to the Medicine Crow site (39BF2) and the Aiken site (39BF215). In July he attended and participated in the 15½th Plains Conference at Pierre, S. Dak. On November 27-28 he attended the 16th Plains Conference for Archeology and presented two papers, "Pre-Ceramic Sites in the Big Bend Reservoir" and "Pre-Ceramic Chronology in the Big Bend Reservoir." In collaboration with Alan H. Coogan, he prepared a manuscript on "Late Pleistocene and Recent Missouri River Terraces in the Big Bend Reservoir, South

Dakota" to be published in the *Proceedings of the Iowa Academy of Sciences*. He was on leave without pay from February 9 to April 24, to complete work on a report on Arctic research previously done for Harvard University. On April 30 and May 1-2, he attended the annual meetings of the Society for American Archaeology. He served throughout the year as chairman of the geologic-climatic section of the Chronology Program. At the end of the year he was in the Lincoln office, continuing work on his report on investigations at the Medicine Crow and related sites.

James J. F. Deetz, temporary archeologist, participated in the 15½th Plains Conference held in July. He completed his fieldwork on September 5 and terminated his employment at that time. He spent a portion of his own time during the winter and spring months analyzing materials from, and preparing a report on, the ceramic components of the Medicine Crow site (39BF2).

Alan H. Coogan, temporary field assistant, participated in the 15½th Plains Conference held in July. He completed his fieldwork and terminated his employment on August 29. In November he participated in the 16th Plains Conference for Archeology held in Lincoln, Nebr., presenting a paper entitled "The Physical Basis for Chronology in the Big Bend Reservoir." During the fall and winter months, on his own time, he prepared the report in collaboration with William N. Irving for publication in the *Proceedings of the Iowa Academy of Sciences*.

Bernard Golden, temporary archeologist, completed his fieldwork and left the project on September 12. During the winter and spring months he devoted a portion of his own time to preparation of the first draft of a report on his 1958 excavations entitled "Excavations at the Hickey Brothers Site (39LM4), Big Bend Reservoir," which he submitted for review early in June. In July he participated in the 15½th Plains Conference held in Pierre.

Charles H. McNutt, archeologist, attended the 15½th Plains Conference in July. When not in the field conducting excavations, he devoted most of his time to analyses of materials he had excavated over the past 2 years and to preparation of reports. He served throughout the year as chairman of the carbon-14 section of the Chronology Program. On temporary-detached duty to the National Park Service from September 23 to November 15, for excavations at Fort Laramie National Monument, he completed a report on that work entitled "Excavations at Old Bedlam, Fort Laramie National Monument, 48G01, Wyoming, 1958." During the Thanksgiving weekend he participated in the 16th Plains Conference for Archeology, held in Lincoln, Nebr., and presented papers reporting on "Excavations in Fielder Bottom Area, Oahe Reservoir," "Exca-

vations at Fort Laramie National Monument," and "Radiocarbon Dating in the Missouri Basin Chronology Program." In April he prepared a paper for the Nebraska Academy of Sciences, entitled "Comments on Two Northern Plains Pottery Wares," published in abstract in the *Proceedings* of the Academy. From April 7 to June 14 he was on leave without pay to complete his doctoral dissertation, which was submitted to the University of Michigan on June 29. On April 30 and May 1-2, he participated in the annual meetings of the Society for American Archaeology, held in Salt Lake City, Utah, and presented a paper entitled "Can Paraffin Be Removed from Charcoal Samples?" in collaboration with Dr. John L. Champe of the University of Nebraska. It was published in abstract in the *Abstracts of Papers of the 24th Annual Meeting of the Society for American Archaeology*. During the year he also continued work on a manuscript on ceramic taxonomy of the South Dakota area and presented two slide talks to local civic groups concerning River Basin Salvage Archeology. He also wrote an article, "Bibliography of Primary Sources for Radiocarbon Dates," in collaboration with Richard P. Wheeler, which was published in *American Antiquity*, volume 24, No. 3. At the end of the year he was preparing to begin fieldwork in the Oahe Reservoir area early in the next fiscal year.

Robert W. Neuman, archeologist, in July participated in the 15½th Plains Conference held in Pierre. During the time he was not in the field conducting excavations he spent a large portion of his time in analyzing materials and preparing reports of excavations conducted the previous two summers. September 29-October 3 he made a trip in company with Harry E. Weakly, who kindly contributed his time, to the Big Bend and Oahe Reservoir areas to collect dendrochronological specimens. On November 27-28 he participated in the 16th Plains Conference for Archeology, presenting a paper on "Archeological Investigations in the Fort Thompson Area." From December 4 to 21 he was on temporary-detached duty with the National Park Service to conduct excavations at George Washington Carver National Monument. He submitted a final report on that work early in January. He prepared a report on "Representative Quill Flatteners from the Central United States," which was read in absentia at the Nebraska Academy of Sciences meeting in Lincoln on April 17, and which was published in abstract in the *Proceedings* of the Academy. From February 9 to June 29 he was transferred to the River Basin Surveys outside the Missouri Basin for work in the Chattahoochee River Basin. His activities there have been described in previous pages. At the end of the year he was back in the Lincoln office working on a report, nearing completion, on

excavations in a series of mound sites in the Big Bend Reservoir area.

G. Hubert Smith, archeologist, at the beginning of the fiscal year was on temporary-detached duty with the National Park Service, conducting excavations at Fort McHenry National Monument, in Baltimore, Md. He submitted a report on his findings in September. On October 1 he returned to duty with the Missouri Basin project and spent the period from then until February 9 compiling a comprehensive report on several seasons' work at Site 32ML2, Forts Berthold I and II, and Like-a-Fishhook Village. This report will combine the findings of five archeologists during four seasons of work at this site in the Garrison Reservoir of North Dakota. In addition there will be an ethnohistoric account of the site. In February he was transferred to the Chattahoochee Basin project where he remained until June 17, when he again returned to the Missouri Basin project. In November he attended the annual meetings of the American Indian Ethnohistorical Conference and the American Anthropological Association, held in Washington, D.C. At a symposium of the latter group he contributed a paper on "Interpretive Values of Archeological Evidence in Historical Research." During the year he had a previously written article entitled "Great Carrying Place" published in the *Naturalist*, a quarterly publication of the Natural History Society of Minnesota. He prepared reviews of "The Indians of Quetico," by Emerson S. Coatsworth, for publication in the fall 1958 issue of *Ethnohistory*, and of "New Light on Old Fort Snelling," by John M. Callender, for publication in a future issue of *Nebraska History*. He also prepared a brief article describing the work at Fort McHenry and submitted it for publication in the *Maryland Historical Magazine*. At the end of the year he was again at work on the comprehensive report on Site 39ML2, Forts Berthold I and II, and Like-a-Fishhook Village.

Richard P. Wheeler, archeologist, when he was not in the field, devoted his time to analyses of materials and preparation of reports on sites excavated by him in past years. He completed the final draft of his manuscript, "The Stutsman Focus: An Aboriginal Culture Complex in the Jamestown Reservoir Area, North Dakota." He also completed the major portion of a draft of a manuscript entitled "Mounds and Earthworks in the Jamestown Reservoir Area of North Dakota" and of another entitled "Three Stratified Occupation Sites in the Oahe Dam and Reservoir Area, South Dakota." In July he participated in the 15½th Plains Conference held in Pierre, and in November attended the 16th Plains Conference for Archeology, held in Lincoln, presenting papers on "Investigations near Old Fort Bennett, Oahe Reservoir" and "Dendrochronology in the Central North-

ern Plains," the latter in collaboration with Harry E. Weakly. In April he presented a paper at the Nebraska Academy of Sciences meeting entitled "Comments on 'Method and Theory in American Archeology,'" which was published in abstract in the *Proceedings of the Academy*. On April 30 and May 1-2, he participated in the annual meetings of the Society for American Archaeology in Salt Lake City, Utah, and presented a paper entitled "The Middle Prehistoric Period in the Central Plains," which was published in abstract in the Abstracts of Papers of the 24th Annual Meeting of the Society for American Archaeology. During the year he collaborated with Charles H. McNutt, as previously mentioned, in an article that was published in *American Antiquity*. On May 30 he terminated his employment with the Missouri Basin project and transferred to the National Park Service, joining the Wetherill Mesa project at Mesa Verde National Park.

COOPERATING INSTITUTIONS

A number of institutions and agencies cooperated in the Inter-Agency Salvage Program in several areas throughout the United States. In addition to those previously mentioned in the sections on the Missouri Basin and the State of Kansas, there were 19 working under agreements with the National Park Service. The University of Georgia continued its investigations at the Hartwell Reservoir on the Tugaloo River and conducted excavations in the Oliver and Walter F. George projects on the Chattahoochee River. The University of Kentucky made surveys and did some digging in the Barkley Reservoir area on the Cumberland River and the Nolin Reservoir Basin on the Nolin River. The New Jersey Museum did salvage work on Tock's Island, N.J. The University of Michigan carried on investigations along the Saginaw River in Michigan. The State University of Iowa did survey and test digging at the Rathbun project on the Chariton River in Iowa. The University of Oklahoma did some further work at Fort Gibson on the Grand River and at the Oolagah Reservoir on the Verdigris River. The University of Texas continued its operations in the Ferrell's Bridge area on Cypress Creek in eastern Texas and in the Diablo Reservoir region along the Rio Grande. Texas Western University also worked in the Diablo district. The School of American Research continued its studies in the Navaho Reservoir area along the San Juan River in northern New Mexico. The University of Utah and the Museum of Northern Arizona completed surveys in the Glen Canyon Reservoir area on the Upper Colorado River and started a series of excavations in a number of sites. The University of Utah completed its investigation of the Flaming Gorge project, also on the Upper Colorado. The University of Arizona conducted investigations along the Gila River above the Painted Rocks Reservoir area. In

California the University of Southern California completed a series of investigations at the Casitas Reservoir on Coyote Creek. The University of California at Los Angeles excavated a site in the Terminus Reservoir area on the Kaweah River. The University of California at Berkeley completed its excavations in the Trinity Reservoir Basin on the Trinity River, and San Francisco State College made studies at the Whiskeytown project on the Upper Sacramento River. The University of Oregon continued operations in the John Day Reservoir in the Columbia River. The University of Washington completed its investigations in the Priest Rapids Reservoir area, also in the Columbia River, and the State College of Washington continued its excavations in the Ice Harbor Reservoir area on the Snake River. A number of local groups and institutions continued to assist on a voluntary basis. These mainly were in New York State, Ohio, Indiana, Tennessee, and southern California.

ARCHIVES OF ETHNOLOGY

The Bureau archives continued during the year under the custody of Mrs. Margaret C. Blaker. On June 8 Nicholas S. Hopkins entered on duty as a summer intern to assist in arranging and describing manuscript collections, and on June 15 Winfield H. Arneson, summer intern, entered on duty to assist with photographic collections.

The use of the manuscript collections by anthropologists and historical researchers continues to increase. Approximately 329 manuscripts were consulted by 92 visitors to the archives, and an equal number were consulted by the archivist in preparing replies to 87 mail inquiries concerning the nature and extent of manuscript information on specific topics or tribes. There were 22 purchase orders for a total of 2,897 pages of manuscript reproductions. In the course of examination, new and more detailed descriptions of about 50 manuscripts were prepared for the catalog, and a number of descriptive lists of manuscripts were prepared for distribution.

An anonymous English-Arikara vocabulary in a homemade notebook of 48 pages, thought to have been recorded ca. 1869-74 by an associate or acquaintance of Washington Matthews, was donated by Dr. John A. Pope of Washington, D.C.

Scholars, publishers, and the general public have continued to draw heavily on the photographic collections of the Bureau as a source of illustration and documentation. There were a total of 504 written inquiries, purchase orders, and personal inquiries concerning photographs, and 1,208 prints were distributed through purchase, gift, or exchange. As in previous years, a number of lists describing photographs in the Bureau's collection were prepared for distribution.

One hundred such lists relating to specific tribes and subjects are now available.

The Bureau has been fortunate in receiving the cooperation of several collectors of photographs that have ethnological and historical value. Some of the collectors lent their pictures for copying, while others gave their prints to the Bureau, thus insuring their preservation and making them available to students.

An important collection of over 115 negatives of Seminole Indians made by Charles Barney Cory, Sr., in Florida in the period 1877-95 was lent by Mrs. Zelma Carolyn Cory of Homewood, Ill., and Charles Barney Cory of Madison, Ill., through Alan R. Sawyer of the Art Institute of Chicago. Enlarged prints from these negatives are on file for reference at the Bureau. In addition, a group of 28 original and postcard prints by various photographers, collected by Charles Barney Cory in Florida and in the West, and relating to the Seminole, Shoshoni, Bannock, Paiute, Dakota, and other western tribes, was lent by Mr. Sawyer for copying.

A collection of 65 photographs of Seminole Indians, made by William D. Boehmer, Dwight R. Gardin, and others, was lent for copying by William D. Boehmer, educational field agent, Seminole Indian Agency, Okeechobee, Fla.

A series of 21 negatives, prints, and postcard reproductions relating to the Seminole Indians, made and collected by the photographer, C. N. Dutton, in the first decade of the 20th century, was lent for copying by Louis Capron, West Palm Beach, Fla., together with 4 Seminole photographs made by Capron in the 1930's.

A collection of 115 prints of Indians of the Dakota, Chippewa, Winnebago, Paiute, Crow, Apache, and other tribes, made by commercial photographers in the latter half of the 19th century, was donated by G. Hubert Smith of Lincoln, Nebr. In addition, several early stereographs of Minnesota Indian subjects were lent by him for copying.

A microfilm of the South Dakota Historical Society's collection of about 400 photographic prints relating to Western Indian history and Indian wars, along with a transcript of the accompanying caption material, was made available to the Bureau, through the courtesy of James Tubbesing of Winchester, Va., who made the film. A reference set of enlarged prints has been made of about 130 subjects selected from the series because they supplement or document photographs already in the Bureau's collections.

A series of commercial photographs, including 17 by H. Buehmann, Tucson, Arizona Territory, relating to the Apache Indians, and 9 by J. N. Choate, Carlisle, Pa., showing students at the Indian School at Carlisle, was received by transfer from the Department of Civil History, Smithsonian Institution.

A group of commercial photographs of Indians—including six outdoor scenes made by F. A. Rinehart in 1900, relating to the Crow Indians and showing details of costume and horse gear—was received as a gift from Henry G. K. Tyrell of Baltimore, Md., in memory of his father, Henry Grattan Tyrell.

A reference set of 18 photographs of drawings by Charles-Alexandre Lesueur, showing Indians and archeological sites sketched by Lesueur in the lower Mississippi Valley in the period 1816-37, was purchased from the studio of Victor Genetier in Paris. The original drawings are owned by the Museum of Natural History, Havre, France.

Six portraits of the Creek chief Pleasant Porter, made at various dates from 1872 to 1905 and assembled by Ralph W. Goodwin of Cambridge, Mass., while writing a biography of the chief, were lent by Mr. Goodwin for copying. He also provided biographical and other background information on several photographs of Creek Indians in the Bureau collections.

While examining the collections of Pawnee photographs at the Bureau, Stephen G. Gover of Weatherford, Okla., a member of the Pawnee tribe, supplied notes on a number of the photographs, including pronunciations and translations of personal names. Mr. Gover also lent for copying a photograph of the Pawnee chief, Crooked Hand, and another of Dog Chief, son of Crooked Hand.

With the assistance of Cheyenne informants, Mrs. Margot Liberty of Birney, Mont., provided identifications and biographical notes for a number of portraits of Cheyenne Indians in the Bureau collections. Father Peter Powell of Chicago, Ill., also furnished notes of this kind.

The extensive collection of photographs of North American Indians transferred to the Bureau from the Library of Congress last year has been sorted and arranged by tribe or area, and is now available for reference.

ILLUSTRATIONS

E. G. Schumacher, staff artist, prepared original illustrations and examined and approved or redrew other illustrations for the various Bureau publications that were being edited for printing. Among the subjects worked on during the year were Kansas archeology and archeological investigations in British Guiana, Mohave ethnopsychiatry and suicide, historic sites archeology on the Upper Missouri, and historic trading posts in North and South Dakota. In addition, a variety of scientific and technical art work was completed for other branches of the Institution.

EDITORIAL WORK AND PUBLICATIONS

The Bureau's editorial work continued during the year under the immediate direction of Mrs. Eloise B. Edelen. There were issued one annual report and four bulletins, as follows:

Seventy-fifth Annual Report of the Bureau of American Ethnology, 1957-1958. ii+36 pp., 5 pls. 1959.

Bulletin 168. The Native Brotherhoods: Modern intertribal organizations on the Northwest coast, by Philip Drucker. iv+194 pp. 1958.

Bulletin 169. River Basin Surveys Papers Nos. 9-14, Frank H. H. Roberts, Jr., editor. ix+392 pp., 73 pls., 13 figs., 9 maps. 1958.

No. 9. Archeological investigations in the Heart Butte Reservoir area, North Dakota, by Paul L. Cooper.

No. 10. Archeological investigations at the Tuttle Creek Dam, Kansas, by Robert B. Cumming, Jr.

No. 11. The Spain site (39LM301), a winter village in Fort Randall Reservoir, South Dakota, by Carlyle S. Smith and Roger T. Grange, Jr.

No. 12. The Wilbanks site (9CK-5), Georgia, by William H. Sears.

No. 13. Historic sites in and around the Jim Woodruff Reservoir area, Florida-Georgia, by Mark F. Boyd.

No. 14. Six sites near the Chattahoochee River in the Jim Woodruff Reservoir area, Florida, by Ripley P. Bullen.

Bulletin 170. Excavations at La Venta, Tabasco, 1955, by Philip Drucker, Robert F. Heizer, and Robert J. Squier. With appendixes by Jonas E. Gullberg, Garniss H. Curtis, and A. Starker Leopold. viii+312 pp., 63 pls., 82 figs. 1959.

Bulletin 171. The North Alaskan Eskimo: A study in ecology and society, by Robert F. Spencer. vi+490 pp., 9 pls., 2 figs., 4 maps. 1959.

Publications distributed totaled 27,721, as compared with 28,131 for the fiscal year 1958.

COLLECTIONS

The following collections were made by staff members of the Bureau of American Ethnology or of the River Basin Surveys and transferred to the permanent collections of the Department of Anthropology, U.S. National Museum:

FROM BUREAU OF AMERICAN ETHNOLOGY

Acc. No.

224347. Archeological materials collected by Ralph S. Solecki, from Marshall County, W. Va., during December 1948 and January 1949.

FROM RIVER BASIN SURVEYS

222362. Indian skeletal material from the Lake Spring site, Columbia County, Ga., collected by Dr. Joseph R. Caldwell.

224546. Archeological material collected by Waldo R. Wedel, for the R.B.S., B.A.E., from Oahe Reservoir, Stanley County, S. Dak., during 1951.

224549. Samples of rock, brick, burned-earth, etc., collected by Ralph S. Solecki, R.B.S., from Ross County, Ohio, on November 30, 1949.

MISCELLANEOUS

Dr. John P. Harrington, Dr. A. J. Waring, and Dr. M. W. Stirling continued as research associates of the Bureau. Dr. Stirling used the facilities of the Bureau laboratory in the preparation of final reports on collections made in previous years during field trips to Panama and Ecuador.

Dr. Wallace L. Chafe, scientific linguist, joined the staff on April 3, 1959. In addition to the two summer interns mentioned in the report of the archivist, the Bureau was fortunate in having the services of Norma L. Hackelman, another summer intern, who assisted with the preparation and checking of bibliographies to be included in the Bureau's most useful bibliography and information leaflet series. Owing to the limited staff and heavy workload, there were issued only two new bibliographies and one revised list for distribution to the public, as follows:

SIL-50, 2d rev., 9/58. Selected list of portraits of prominent Indians in the collections of the Bureau of American Ethnology. 3 pp.

SIL-174, 12/58. Selected references on the Indians of Southeastern North America. (State index, pp. 12-14; musical recordings, p. 14; museum exhibits, pp. 14-16.) 16 pp.

SIL-197, 11/58. Selected bibliography of maps relating to the American Indian. 4 pp.

There were 2,759 letters of inquiry about American Indians and related problems received in the Director's office alone during the year. Information was furnished by staff members in answer to many of the queries, and to others, information leaflets or other printed items were supplied. In addition to the printed bibliographies and information leaflets described above several such items were compiled on topics of a general or specific nature and typescript copies sent out in answer to the hundreds of requests for this information. Several manuscripts were read and appraised by staff members for colleagues and scientific organizations. Numerous specimens were identified for owners and data supplied on them.

Respectfully submitted.

FRANK H. H. ROBERTS, Jr., *Director.*

Dr. LEONARD CARMICHAEL,
Secretary, Smithsonian Institution.

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Seventy-seventh Annual Report

of the

**BUREAU OF AMERICAN
ETHNOLOGY**



1959-1960



SMITHSONIAN INSTITUTION

WASHINGTON

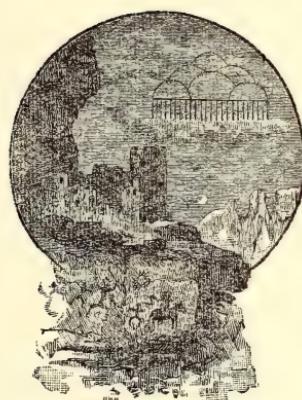
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SEVENTY-SEVENTH
ANNUAL REPORT OF THE
BUREAU OF
AMERICAN ETHNOLOGY

TO THE SECRETARY OF THE
SMITHSONIAN INSTITUTION

1959-1960



UNITED STATES
GOVERNMENT PRINTING OFFICE
WASHINGTON : 1961

BUREAU OF AMERICAN ETHNOLOGY

June 30, 1960

Director.—FRANK H. H. ROBERTS, Jr.

Anthropologists.—HENRY B. COLLINS, WILLIAM C. STURTEVANT,
WALLACE L. CHAFE.

Research Associates.—JOHN P. HARRINGTON, SISTER M. INEZ
HILGER, MATTHEW W. STIRLING, A. J. WARING, Jr.

Archivist.—MRS. MARGARET C. BLAKER.

Scientific illustrator.—E. G. SCHUMACHER.

Administrative assistant.—MRS. JESSIE S. SHAW.

RIVER BASIN SURVEYS

Director.—FRANK H. H. ROBERTS, Jr.

Chief, Missouri Basin Project.—ROBERT L. STEPHENSON.

Archeologists.—WARREN W. CALDWELL, HAROLD A. HUSCHER,
CARL F. MILLER, ROBERT W. NEUMAN, G. HUBERT SMITH.

SEVENTY-SEVENTH ANNUAL REPORT
OF THE
BUREAU OF AMERICAN ETHNOLOGY

FRANK H. H. ROBERTS, JR., *Director*

SIR: I have the honor to submit the following report on the field researches, office work, and other operations of the Bureau of American Ethnology during the fiscal year ended June 30, 1960, conducted in accordance with the act of Congress of April 10, 1928, as amended August 22, 1949, which directs the Bureau "to continue independently or in cooperation anthropological researches among the American Indians and the natives of lands under the jurisdiction or protection of the United States and the excavation and preservation of archeologic remains."

SYSTEMATIC RESEARCHES

Dr. Frank H. H. Roberts, Jr., Director of the Bureau, devoted part of the year to general supervision of the activities of the Bureau and the River Basin Surveys. In July he inspected the work of excavating parties operating in the Pomona Reservoir area in Kansas, the Big Bend and Oahe Reservoir areas in South Dakota, and a portion of the Oahe Basin in North Dakota. Three of the parties were from co-operating agencies and three represented the River Basin Surveys. In addition, he visited two excavations that were not a part of the salvage program, one conducted by a University of Nebraska field party and the other by a group from the State Historical Society of Nebraska. Dr. Roberts was accompanied by Carroll Burroughs from the Branch of Archeology of the Washington office of the National Park Service and Dr. Robert L. Stephenson, Chief of the Missouri Basin Project of the River Basin Surveys. While at Pierre, S. Dak., they participated in an informal conference attended by leaders of all the parties working in the Plains during the summer, many of their student helpers, and representatives from various universities and museums in the area. Virtually every phase of Missouri Basin archeology was discussed.

In November Dr. Roberts went to Lincoln, Nebr., where he reviewed the operations of the field headquarters and laboratory of the River Basin Surveys and took part in the sessions of the Plains Archeological Conference at the University of Nebraska. At Omaha he met with representatives of the Corps of Engineers and the Region Two Office

of the National Park Service to consider various problems pertaining to salvage operations in the Missouri Basin.

During late December and early January Dr. Roberts represented the Bureau at the meetings of the American Anthropological Association in Mexico City. He also visited various museums and archeological sites in the surrounding area. Late in January after his return to Washington he participated in the meetings of the Committee for the Recovery of Archeological Remains held at the Department of the Interior. He presented a summary of the results of the activities of the River Basin Surveys during the preceding year and joined in the discussions pertaining to future plans for the Inter-Agency Archeological Salvage Program.

In April Dr. Roberts went to Lincoln to inspect the operations of the Missouri Basin project office and met with representatives of Region Two of the National Park Service to consider the fiscal situation and fieldwork to be carried on during the 1960 summer season. Dr. Roberts assisted in the preparation of budgets and plans for the various River Basin Surveys parties which were to be leaving Lincoln early in June.

At the request of the National Park Service, Dr. Roberts was authorized to serve as a member of an advisory group for the Wetherill Mesa excavations at Mesa Verde National Park. He went to Mesa Verde late in May and with other members of the group inspected the work under way at two large cliff ruins and in the project laboratory. The group spent one day discussing various problems pertaining to the project and made a number of recommendations with respect to the continuance of the investigations.

Dr. Roberts did the technical editing of a series of four reports on archeological excavations in three reservoir areas. They will appear as River Basin Surveys Papers Nos. 21-24 in Bulletin 179 of the Bureau of American Ethnology.

Dr. Henry B. Collins, anthropologist, continued his Eskimo studies and other Arctic activities. He prepared an article on the native peoples of the Arctic for a forthcoming edition of the *Encyclopaedia Britannica*, and his paper on Eskimo art appeared in the first issue of Dartmouth College's new journal devoted to Polar research. In another paper, published in *Current Anthropology*, he discussed recent archeological discoveries in Alaska and Siberia and assessed the roles of local culture growth, diffusion, trade, population movements, tradition, and geographical patterning as causative factors involved in the development and continuity of prehistoric Eskimo culture in the Bering Strait area.

Dr. Collins was elected to the Board of Governors of the Arctic Institute of North America for a 3-year term. He continued to serve

as a member of two Arctic Institute committees: (1) the Publications Committee, which is responsible for preparation of the Institute's quarterly journal *Arctic* and its two series, *Technical Papers* and *Special Publications*, and (2) the Research Committee, which plans the Institute's research program by passing upon grant applications, acting as a scientific advisory group for military agencies engaged in conduct of basic research in the Arctic and Antarctic, and planning programs of Polar research which the Institute administers for Government agencies and other organizations.

He also continued to serve as chairman of the directing committee of the *Arctic Bibliography*, a comprehensive work prepared by the Arctic Institute of North America for the Department of Defense. The purpose of the bibliography is to provide a key to scientific publications in the principal libraries of the United States and Canada relating to the Arctic and sub-Arctic areas and to low-temperature conditions, and to assemble and systematize this material so that it may be readily available to scientists and others concerned with problems of northern research and development. In continuation of this program, Volume 8 of *Arctic Bibliography* (1,281 pages) was issued by the Government Printing Office in September 1959. It summarizes and indexes the contents of 5,622 publications in all fields of science. Volume 9, containing abstracts of 7,192 publications, is in press, and work is in progress on Volume 10. Covering the entire range of scientific literature in all languages on the Arctic and subarctic regions of the world, the *Arctic Bibliography* to date has abstracted and indexed the contents of 56,278 publications relating to these areas and to low-temperature conditions.

In July 1959 Dr. Collins submitted a proposal to the National Science Foundation for the Arctic Institute of North America to translate Russian anthropological publications relating to northern Eurasia. Much of the Soviet and earlier Russian anthropological literature, particularly that on the archeology, ethnology, and physical anthropology of Siberia, has a direct bearing on problems of American anthropology. However, this Russian literature is not available to the great majority of English-speaking anthropologists. English translations of selected articles and monographs from Russian journals and series would begin to meet this long-felt need. In March 1960 the National Science Foundation awarded a grant to the Arctic Institute for the translation project and the work began in April, under the direction of Dr. Henry N. Michael of Temple University. An advisory committee, of which Dr. Collins is chairman, selects materials for translation and advises on matters pertaining to the publication and distribution of the translations. The translations will be printed in an inexpensive format, as a special publication series of the Arctic Institute, and offered for sale at modest prices.

With the support of grants from the American Philosophical Society and the National Science Foundation, Dr. Collins left for Europe June 24 to make a comparative study of archeological materials in European museums and to attend the 34th International Congress of

At the beginning of the fiscal year, Dr. William C. Sturtevant, Americanists in Vienna and the 6th International Congress of Anthropological and Ethnological Sciences in Paris.

ethnologist, was concluding a period of fieldwork begun in February 1959 among the Seminole Indians in Florida. Returning north, he spent July 8 in and around Charleston, S.C., where he examined several old Southeastern Indian specimens and a portrait of Osceola, the famous Seminole leader, in the Charleston Museum, visited Osceola's grave at nearby Fort Moultrie, and briefly investigated modern Gullah Negro basketmaking near Fort Moultrie.

On his return to Washington, Dr. Sturtevant spent most of his time at work on the materials collected during his extended field trip in Florida. He also prepared a paper on the agriculture of the 16th-century Taino Indians of the West Indies, which he delivered at the 58th Annual Meeting of the American Anthropological Association in Mexico City in December. While in Mexico Dr. Sturtevant visited the impressive Maya archeological site at Palenque and then spent four days observing the lacquer-making industry at Uruapan, Michoacán, and making a small collection illustrating this craft for the National Museum.

In mid-November, Dr. Sturtevant spent two days at Newtown, Cattaraugus Reservation, New York, for the wake and funeral of Solon Jones, who was a leader of the Longhouse religion, a great expert on Seneca ceremonies, a well-known orator in Seneca, and in his younger days a famous lacrosse player. Mr. Jones will be greatly missed by his many Iroquois friends and coreligionists and also by anthropologists familiar with his community.

Dr. Sturtevant attended the 12th Conference on Iroquois Research (Red House, N.Y., in October), the annual meetings of the Association for Asian Studies (New York, in April), and the Society for American Archaeology (New Haven, in May).

Dr. Wallace L. Chafe, linguist, was engaged in fieldwork on the Tonawanda Reservation in New York State during July, August, and early September. He collected material for the completion of a Seneca dictionary and recorded and transcribed several religious texts which are part of the Longhouse ceremonial pattern. This fieldwork was sponsored by the New York State Museum and Science Service in cooperation with the Bureau of American Ethnology.

Dr. Chafe served as chairman of the 12th Conference on Iroquois Research, held at Red House, N.Y., October 16-18.

During the first three weeks of November Dr. Chafe traveled to North Dakota and Oklahoma to acquaint himself with the present number and location of speakers of the Caddoan languages. This language family includes Arikara, Pawnee, Wichita, and Caddo. He obtained estimates of the number of speakers of each language, collected word lists, and made lexicostatistic comparisons. The trip was made under a grant from the American Philosophical Society.

He returned to North Dakota for the first three weeks of June to collect further material on the Arikara language. He obtained phonological, grammatical, and lexical data which will be used in a comparative study of the languages of the Caddoan family.

Dr. Chafe published articles on the Seneca language in *Language* and the *International Journal of American Linguistics*. In March he completed an index of the journal *Language* for the years 1955-59. Under the auspices of the American Philosophical Society, he began work during the spring on a project designed to obtain estimates of the present number of speakers of each of the Indian languages of North America.

RIVER BASIN SURVEYS

The River Basin Surveys continued its participation in the Inter-Agency archeological and paleontological salvage program. Its activities were in areas to be flooded or otherwise destroyed by the construction of large dams. The work was carried on in cooperation with the National Park Service and the Bureau of Reclamation of the Department of the Interior, the Corps of Engineers of the Department of the Army, and a number of State and local institutions. The investigations during the fiscal year 1959-60 were supported by a transfer of \$122,055 from the National Park Service to the Smithsonian Institution. Of that sum, \$98,055 was for use in the Missouri Basin and \$24,000 for investigations along the Chattahoochee River in Alabama and Georgia. On July 1, 1959, the Missouri Basin Project had a carryover of \$10,764, and that, with the new appropriation, provided a total of \$108,819 for the program in the Missouri Basin. The grand total of funds available for the River Basin Surveys for 1959-60 was \$132,819.

Activities in the field throughout the year were mainly concerned with excavations, although some limited surveys were carried on and one party made a series of studies of skeletal material in museums and laboratories throughout the Missouri Basin. Because of a reduction in funds, fieldwork was more limited than in the previous year. On July 1, 1959, there were three excavating parties working in the Missouri Basin in South Dakota, and the mobile group was operating in Nebraska. One of the parties in South Dakota was digging sites in the Big Bend Reservoir area and the other two were working in

the Oahe Reservoir area. The excavating parties completed their work and returned to the headquarters at Lincoln, Nebr., in August, while the mobile party finished its season on August 21, after having visited 22 institutions and 11 field camps in six Missouri Basin and three adjacent States.

In December one small party made a brief trip to the Lewis and Clark Lake above the Gavins Point Dam to examine a site which was being destroyed by wave action. The same party also visited a mound group near Mitchell, S. Dak., where unauthorized digging had been reported. The cooperation of the owner was obtained to prevent further destruction of the site which is an exceptional one for that area. From Mitchell the party proceeded to the Big Bend Dam site and made an inspection of the construction activities then under way. A second party returned to the Lewis and Clark Lake in February and spent eight days salvaging materials from the site which had been examined in December. In addition to a member of the River Basin Surveys staff there was a representative from the Laboratory of Anthropology of the University of Nebraska. These men were assisted by the area engineer, the reservoir naturalist, and the reservoir manager. The cooperative effort produced materials which identified the site as being attributable to the Woodland cultures. Activities along the Chattahoochee River in Alabama-Georgia were resumed in January when a survey-testing party began operations in the Walter F. George Reservoir area which continued until mid-June when work was stopped and the head of the party returned to Lincoln, Nebr. Early in June one party began excavations in the Big Bend Reservoir area near the dam axis and another started digging at a mound site near the North Dakota-South Dakota boundary in the Oahe Reservoir area. A third party began studies the latter part of the month at the site of historic Fort Sully north of Pierre in the Oahe Reservoir Basin. All three were continuing their investigations at the end of the fiscal year.

As of June 30, 1960, the River Basin Surveys had carried on reconnaissance work or excavations in 255 reservoir basins located in 29 States. In addition, four canal areas and two lock projects had also been investigated. The sites located during the years between 1946, when the program started, and the close of the fiscal year total 4,948, and of that number 1,154 were recommended for excavation or limited testing. Because of the large number of sites and the lack of sufficient time and funds for the work, complete excavation has not been possible in any but a few exceptionally small ones. For that reason, when the term "excavation" is used, it implies digging only as much of a site as is deemed necessary to obtain a good sample of the materials and information to be found there.

Preliminary appraisal reports have been issued for most of the reservoir areas which were surveyed. In a few cases no archeological manifestations were noted and no general report was distributed. During the last fiscal year preliminary appraisal reports for the Oliver Dam, the Walter F. George Dam and Lock project, and the Columbia Dam and Lock project on the Chattahoochee River were mimeographed and distributed. Since the beginning of the salvage program 188 such reports have been issued. The discrepancy between the number of reservoirs surveyed and that of the reports issued is due to the fact that in several cases a number of projects located within a single basin or sub-basin were covered in one report.

By June 30, 1960, 487 sites in 54 reservoir areas located in 19 different States had been either tested or dug sufficiently to provide good information about them. The sites investigated range in age from those representing hunting and gathering cultures of about 10,000 years ago to early historic Indian village locations and the remains of frontier trading and Army posts of European origin. The results obtained from some of the excavations have been published in the Smithsonian Institution Miscellaneous Collections, in Bulletins of the Bureau of American Ethnology, and in various scientific journals and historical publications. During the year River Basin Surveys Papers Nos. 21-24, comprising Bulletin 179 of the Bureau of American Ethnology, were sent to the printer. The papers consist of a report on excavations in the Texarkana Reservoir Basin on the Sulphur River in east Texas, the Coralville Reservoir area on the Des Moines River in Iowa, and two detailed accounts about work in various sites in the McNary Reservoir area on the Columbia River. The Texarkana report was written by Edward B. Jelks. The Coralville paper was prepared by Warren W. Caldwell and the McNary Reservoir papers were the work of Joel L. Shiner and Douglas Osborne. The latter two round out and complete the data which were contained in Osborne's River Basin Surveys Paper No. 8, Bulletin 165, "Excavations in the McNary Reservoir Basin near Umatilla, Oregon." At the end of the year the editors were working on Carl F. Miller's manuscript which gives in detail the results of his excavations at the John H. Kerr Reservoir basin in the Roanoke River, Virginia-North Carolina.

On June 30, 1960, the distribution of reservoir projects that had been surveyed for archeological remains was as follows: Alabama, 4; Arkansas, 1; California, 20; Colorado, 24; Georgia, 8; Idaho, 11; Illinois, 2; Iowa, 3; Kansas, 10; Kentucky, 2; Louisiana, 2; Minnesota, 1; Mississippi, 1; Montana, 15; Nebraska, 28; New Mexico, 1; North Dakota, 13; Ohio, 2; Oklahoma, 7; Oregon, 27; Pennsylvania, 2; South Carolina, 1; South Dakota, 10; Tennessee, 4; Texas, 19; Virginia, 2; Washington, 11; West Virginia, 3; Wyoming, 22.

Excavations had been made or were under way in reservoir areas in Arkansas, 1; California, 5; Colorado, 1; Iowa, 1; Georgia, 7; Kansas, 5; Montana, 1; Nebraska, 1; New Mexico, 1; North Dakota, 4; Oklahoma, 2; Oregon, 4; South Carolina, 2; South Dakota, 4; Texas, 7; Virginia, 1; Washington, 4; West Virginia, 1; Wyoming, 2. The preceding figures include only the work of River Basin Surveys or that where there was direct cooperation between the Surveys and local institutions. The work done by State and local institutions under agreements with the National Park Service has not been included because complete information about them is not available in the River Basin Surveys office.

The National Park Service, the Bureau of Reclamation, the Corps of Engineers and other Army personnel, and various State and local institutions contributed helpful cooperation throughout the year. Transportation and guides were provided by the Corps of Engineers for the reconnaissance in one of the reservoir areas, and invaluable help was received through the commanding officer at Fort Benning in Georgia who assigned certain Army personnel to assist in some of the activities in the portion of the Walter F. George Reservoir Basin which lies in the Fort Benning Reservation. In addition, the Army Air Command at Lawson Field furnished a helicopter so that aerial photographs could be made of major archeological sites and current excavations, as well as the progress in construction of both the Columbia Dam and Lock and the Walter F. George Dam and Lock. In the Missouri Basin the project engineers for the Oahe Reservoir provided storage space for equipment and also space for temporary living accommodations. Mechanical equipment was lent in several instances by the construction agency, which accelerated both the stripping of the top soil from sites and the back-filling of trenches and test pits. The field personnel of all of the cooperating agencies assisted the party leaders from the River Basin Surveys in numerous ways and the relationship was excellent in all areas. Both in Washington and in the field the National Park Service continued to serve as the liaison between the various agencies. The Park Service also prepared the estimates and justifications for the funds needed to carry on the salvage program. Along the Chattahoochee River the Georgia Historical Commission, the University of Georgia, and various local clubs and groups of citizens in both Alabama and Georgia assisted the leader of the River Basin Surveys party in many ways.

General supervision of the program was carried on from the main office in Washington, while the activities in the Missouri Basin continued to operate from the field headquarters and laboratory at Lincoln, Nebr. The latter also provided equipment and office assistance for the Chattahoochee River project. The Lincoln laboratory

processed the materials collected by excavating parties in the Missouri Basin and also handled those from the Chattahoochee Basin.

Washington office.—The main headquarters of the River Basin Surveys at the Bureau of American Ethnology continued throughout the year under the direction of Dr. Frank H. H. Roberts, Jr. Carl F. Miller, archeologist, was based at that office and from time to time assisted the Director in some of the general administrative problems. Harold A. Huscher, archeologist, worked under the general supervision of the Washington office but because of lack of space and laboratory facilities continued to work at the field headquarters in Lincoln, Nebr.

At the beginning of the fiscal year Mr. Miller was occupied with the technical report on excavations which he previously conducted at the Hosterman Site in the Oahe Reservoir basin in South Dakota. In September he attended a conference on eastern archeology held at Ligonier, Pa., under the auspices of the Carnegie Museum of Pittsburgh and composed of a group of invited guests. The problems discussed were mainly concerned with the Paleo-Indian, Eastern Archaic, and Woodland cultures. In October Mr. Miller made a survey of the Sutton Reservoir area in West Virginia. In November he attended the Southeastern Archeological Conference held at Macon, Ga. He completed his report on the Hosterman Site in February. During April he made a survey of archeological sites along the Cowpasture River in Bath County, Virginia, investigating a number of small rock mounds and several open sites. During the year Mr. Miller examined and reported on several collections of artifacts which were sent in from various areas in the East and Southeast. He also gave a number of talks before various groups and societies in the Washington area.

At the beginning of the fiscal year Mr. Huscher was in the Lincoln office working on maps, records, and collections from the Oliver Dam and Reservoir, the Columbia Dam and Lock, and the Walter F. George Dam and Lock in the Chattahoochee Basin between Alabama and Georgia. In July he attended a field conference held at Pierre, S. Dak. In November he went to Macon, Ga., and participated in the Southeastern Archeological Conference held there. On his return to Lincoln he attended the Plains Conference which was held at the University of Nebraska. His three appraisal reports on the Chattahoochee projects were completed in October, November, and December. They were processed at the Lincoln office and were distributed from the Washington office in April. In January Mr. Huscher returned to the Alabama-Georgia area where he resumed his field investigations in the Walter F. George Reservoir area. He returned to Lincoln late in June and at the end of the fiscal year was on annual leave.

Alabama-Georgia.—From January 19 to June 13 a series of test excavations was carried on at 10 sites in the area to be flooded by the Walter F. George Dam and Lock project. Six of the sites were in Georgia and four in Alabama. Because the season was unusually wet, work was limited for much of the time to sites in the sandy bottoms. At each location a number of pits 10 feet square were sunk through the deposits to sterile subsoil. At one of the sites in Georgia the main occupation appeared to have been Early Mississippian, although there was a thin surface overlay of the late Creek potsherds. There were some indications that Weeden Island peoples had been there for a time, and in the bottom levels decomposed flints similar to those which occur in abundance on the Macon Plateau were present. The various materials from the site suggest a long period of occupation or several occupations at intervals covering a considerable span of years. At two of the Georgia sites there were large plowed-down mounds with indications of village areas. One of them presumably dates from the Archaic period, and the other, in addition to Archaic materials from levels below the mound, also gave evidence of Weeden Island affiliations. Several of the sites contained Woodland materials, and one of those in Alabama presumably was the location of the Yuchi village mentioned by William Bartram and Benjamin Hawkins in their reports on travels through the Creek country in the 18th century. During the field season collections were made from a total of 48 sites, 26 of which had not been previously investigated. Field lots of specimens, most of which were excavated, numbering 1,680, were added to the previous 1,086 field lots collected in the 1958 and 1959 seasons. This makes a total of 2,766 field lots for the three seasons of investigations along the Chattahoochee.

In addition to the work of the River Basin Surveys parties there were cooperative projects by the University of Georgia, the University of Alabama, and Florida State University. At the end of the fiscal year the University of Georgia was excavating a large platform mound near Stark's Landing in Georgia. The University of Alabama was digging in a village site adjacent to a large mound near Upper Francis Landing in Alabama. The Florida State University party was beginning investigations at the Spanish Fort of Apalachicola and the adjacent aboriginal village near Holy Trinity, Ala.

Missouri River Basin.—The Missouri Basin Project, for the fourteenth consecutive year, continued to operate from the field headquarters and laboratory in Lincoln, Nebr. Dr. Robert L. Stephenson served as chief of the project throughout the year. Activities included surveys, excavations, analysis of materials, and reporting on results. During the summer months efforts were mainly concerned with excavations. Analyses and the preparation of reports received

the major attention during the winter months. The special chronology program, begun two years ago, continued to receive attention throughout the year.

At the beginning of the fiscal year the permanent staff, in addition to the chief, consisted of five archeologists, one administrative assistant, one clerk-stenographer, one part-time file clerk, one clerk-typist, one illustrator, one photographer, and three museum aides. Temporary employees included one cook and six crewmen.

During the summer field season one archeologist and one physical anthropologist were temporarily added to the staff. During July, 11 additional crewmen were employed. The temporary archeologist was terminated on August 28, and the temporary physical anthropologist on August 21. All field crewmen were terminated during the last week of August.

On September 4, one permanent archeologist resigned to return to graduate school, and on May 27 one permanent archeologist resigned to join the staff at the University of Tennessee. On January 2, the clerk-typist resigned, and on February 5, the clerk-stenographer resigned. On February 23, a clerk-stenographer joined the staff but resigned on April 1 and was replaced on May 2. The file clerk was transferred from part time to full time on June 27. The temporary cook was transferred to laboratory assistant on September 1 and to the permanent staff on January 2. During the period from April 2 to June 1, one archeologist was lent to the National Park Service to conduct archeological excavations at Colonial National Historical Park, Yorktown, Va.

At the end of the fiscal year there were three archeologists in addition to the chief, one administrative assistant, one file clerk, one clerk-stenographer, one illustrator, one photographer, three museum aides, and one laboratory assistant on the permanent staff, and 12 crewmen on the temporary staff.

During the year there were nine Smithsonian Institution River Basin Surveys field parties at work within the Missouri Basin. Two were in the Oahe Reservoir area, one in the Big Bend Reservoir area, and one (a mobile party) covered the Missouri Basin area in general during July and August. Two small parties made investigations during December and February in the Gavins Point Reservoir area. Two parties were excavating in the Oahe Reservoir area and one in the Big Bend Reservoir area during June.

Other fieldwork in the Missouri Basin during the year included 10 parties from State institutions operating under cooperative agreements with the National Park Service and in cooperation with the Smithsonian Institution in the Inter-Agency Archeological Salvage Program.

Reduction of funds for fiscal year 1960 necessitated a curtailment of field activities, in comparison with past years, and a shift in the methods of carrying on the salvage program. Despite the accomplishments of previous years in salvaging archeological values from the many reservoir areas in the Missouri Basin, scores of sites still remain to be studied and the reservoirs are rapidly nearing completion. The enforced reduction of activities presented a critical problem. The shift, or readjustment, in methods of fieldwork seemed the only reasonable expedient to accomplish the mission set out for the Salvage Program. This was a shift from major excavation of key sites and sampling of nearby, related sites, to a mere sampling of both key and secondary sites. This change in emphasis will be satisfactory for at least two seasons because of the earlier work in these same areas when full-scale excavations were possible at a number of key sites. There is a framework of information from extensively excavated sites against which the data from the newly sampled sites can be evaluated. There are, however, many major sites, outside the known cultural framework, that promise to provide an abundance of new information if excavated, but little or nothing if only sampled. Another year, these sites must be excavated or lost forever. The sampling approach, in the face of limited field activities, produced worthwhile results in the field seasons of 1959 and 1960. Full-scale excavations of key sites, though, must again be carried on in succeeding years.

At the beginning of the fiscal year, Dr. Warren W. Caldwell and a crew of six were engaged in testing a series of sites in the Big Bend Reservoir area. The specific locality was that of the construction area of the dam along the right bank of the Missouri River in Lyman County, South Dakota, and extending upstream to the area of the old Lower Brulé subagency, a distance of approximately 12 miles. Sampling investigations were made at 19 of the recorded sites in the area and two new sites were located, recorded, and tested. A variety of cultural manifestations is represented.

The first group of these sites is located near the mouth of Good Soldier Creek in the area where the powerhouse and right abutment for the Big Bend dam is to be built. Site 39LM235 had been partially destroyed by landing-ramp construction but was extensively tested in the remaining portions. Site 39LM236 was inundated by extreme high water of the Fort Randall Reservoir and tests made in it in the latter part of the season, after the water had receded, again demonstrated the uselessness of working a site that had been flooded. Sites 39LM237 and 39LM238 were examined with limited test pits. All four sites consisted of stratified concentrations of refuse material partially exposed in the cut bank along the river and creek. Very little artifact

material was recovered this season and the results of the tests proved to be of small diagnostic value. The first three appear to have been sporadically occupied camping places. The fourth, the Good Soldier Creek site (39LM238), previously investigated, is a stratified site of Plains Woodland affiliation overlain by a Mississippian component.

A series of six sites near the mouth of Councilor Creek was investigated. Site 39LM240 was briefly tested and proved to be another sporadically occupied camp site with a few potsherds of the Iona types suggesting occupation in the later ceramic period of circular earth lodges. Site 39LM234 was extensively tested with a series of 10 test pits scattered through the multitude of hummocks and depressions on the surface. Results were disappointing but adequate to demonstrate that it was the location of a village of one of the late periods in the area. Sites 39LM88 and 39LM89, newly located in 1959, and the Tom Rattler site (39LM214) were briefly tested with very little diagnostic material being recovered. The Useful Heart site (39LM6) was extensively tested. There a sterile mantle 3 to 4 feet in depth covered the remains of a village of late circular houses related to the Stanley Focus. A lower level of occupation at a depth of 6.5 feet represented an earlier time level with pottery related to the Over Focus.

The next group of sites upstream (39LM229, 230, 231, and 233) were all briefly tested with negative results and written off as small, sporadically occupied camp sites. A fifth site in this group, the Pretty Head site (39LM232) was not investigated as it was the location of a large village and is scheduled for more extensive excavation than time would allow in the 1959 season. It is the only site in that immediate vicinity where additional work is required. The next group upstream included site 39LM217, where brief testing produced only scattered evidence of sporadic occupation, and four significantly productive sites. The School site (39LM216) was the remains of a large village of circular earth lodges and contained pottery of Iona types. One house quadrant and several test trenches were excavated. The Crazy Bull site (39LM219) was another large village site of circular earth lodges and provided pottery of the Iona, Stanley, and Talking Crow types. Half a house and several test trenches were excavated. Site 39LM220, likewise, had been a village of circular earth lodges and it yielded pottery predominantly of the Iona types. There a half house and several test trenches were excavated. Site 39LM221 was a group of three moderate-size burial mounds. Trenching in them uncovered burial pits, infant burials, and scattered human bones. The artifacts were not abundant but were sufficient to demonstrate a probable relationship of the site to the Truman Mound group (39BF224) excavated by Robert W. Neuman in 1958. Finally a brief investigation

of one feature was made at the Hickey Brothers site (39LM4), excavated by Bernard Golden in 1958. There a probable rectangular house pattern was partially uncovered, but the data from the site still are inadequate for a convincing demonstration of the cultural group to which it belongs.

In all, the Caldwell party examined 21 sites, of which 1 was a burial mound group, 1 was a large village probably of the rectangular house period, 4 were large villages of late circular earth lodges, 1 was a stratified village of rectangular earth lodges overlain by an occupation of later, circular earth lodges, and 14 sites which were sporadically occupied camps producing little diagnostic material. Except for the Pretty Head site (39LM232), all others in this area may now be written off as not requiring further investigation unless something new is uncovered in the course of construction of the Big Bend Dam. The Caldwell party terminated the season's work on August 6, after 9 weeks in the field.

The second River Basin Surveys party in the field at the beginning of the year was a team of physical anthropologists consisting of William M. Bass, 3d, and two assistants. They were engaged in a survey of human skeletal materials from all the reservoir areas in the Missouri Basin, as well as skeletal materials from other institutions and areas outside reservoirs for the purpose of bringing together data on all the presently extant Indian remains from the Plains area. They visited all the field camps, assisting in the excavation of burials where needed, and went to all the museums and other repositories of archeological materials in the general area. They took anthropometric measurements on the remains of over 2,000 individuals, studying 22 institutional collections and visiting 11 field camps in Oklahoma, Kansas, Missouri, Nebraska, Iowa, Wisconsin, Minnesota, South Dakota, and North Dakota. The analyses of the scores of measurements, both cranial and postcranial, taken on each of the 2,000 individuals, will provide the first broad study of the physical characteristics of the Indians who occupied the prehistoric villages in the various reservoir areas in the Missouri Basin. With the data on the differences between the physical types, the archeologist will be in a much better position to understand the cultural movements of peoples between villages and village areas. This field party was materially assisted, through the kindness of Dr. Wilton K. Krogman, by a grant-in-aid to Bass from the University of Pennsylvania Child Growth and Development Center. The party completed its season on August 21, after 9 weeks in the field.

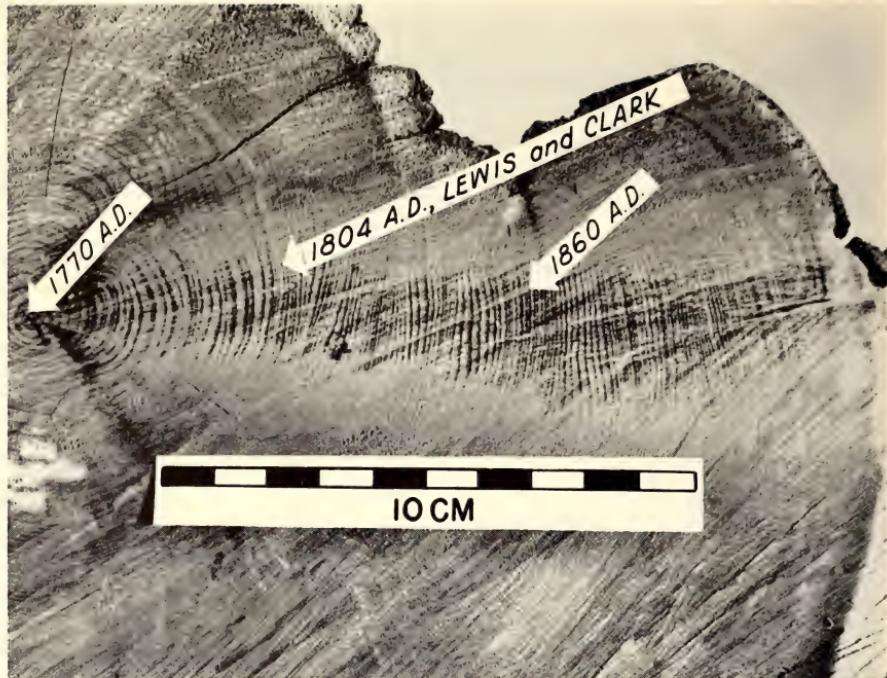
The third River Basin Surveys field party of the 1959 season began work in the Little Bend area of Sully County, South Dakota, in the Oahe Reservoir, on July 2. It consisted of a crew of seven under the



1. Test excavation in site 39SL19, a large village of circular earthlodges, in the Little Bend area of the Oahe Reservoir, producing Stanley Ware pottery. Examples of architectural style, settlement pattern, and artifact materials can be obtained by a series of tests of this kind at each site. River Basin Surveys.



2. Expanded test excavation in edge of circular house at site 39SL13, in the Little Bend area of the Oahe Reservoir. Center of house is to right of picture. A leaner post of the house wall can be seen to right of menu board. Large excavated cache pit is shown in center of picture and an unexcavated cache pit appears as dark semicircle at left. River Basin Surveys.



1. Section of a large cedar (*Juniperus*) cut by a Missouri Basin Project-Smithsonian Institution field party in 1958. The tree stood high on the bluffs overlooking the "Grand Detour," the great loop of the Missouri now called the Big Bend. The earliest annual ring dates from ca. A.D. 1770. This log provides a fine illustration of variable tree growth in response to varying rainfall. The drought years of the 1840's and the 1930's are plainly visible. River Basin Surveys.



2. View of soil profile section in site 39BF2, a deeply buried, multicomponent site in the Big Bend Reservoir. Soil samples were taken from seven zones in this cut to assist in determining the geologic-climatic periods of the various occupations. River Basin Surveys.

direction of Dr. Charles H. McNutt. This party, like that of Caldwell in the Big Bend Reservoir, spent the season making a series of small-scale test excavations in a large number of sites along a restricted area of the Missouri River. The crew was supplemented in mid-season by 5 additional crewmen, making a total party of 12. Sample excavations were conducted at 18 of the 22 previously recorded sites in the Little Bend. The remaining four sites are of sufficient elevation to remain above water and also appear to be of minor significance. In addition, 11 new sites were located and recorded but only one was of sufficient value to warrant testing and mapping.

The uniformity of the cultural materials from the Little Bend is rather remarkable. Only two sites (39SL12 and 39SL13) provided any evidence of long-rectangular house villages, and that is only in the form of Thomas Riggs types of pottery. All the other sites had been small to large villages of circular earth lodges providing sherds of only two major classes of pottery, Russell Ware and Stanley Ware. House depressions in all sites are uniformly circular and are usually either ringed, shallow depressions, or unringed deep depressions. Russell Ware pottery occurs characteristically with the former and Stanley Ware pottery with the latter. The consistency of this association is striking. Villages with ringed house depressions and Russell Ware pottery were usually compact and consisted of 1 large (presumably ceremonial) house and from 5 to 10 small (presumably domiciliary) houses. No fortifications were found in association with any of these villages. Villages with unringed, deep house depressions and Stanley Ware pottery were either compact or diffuse and may or may not have had a particularly large (ceremonial) house and a fortification ditch. Some historic material was found in three of the four sites of this type examined. The individual sites are summarized briefly.

Site 39SL12 consists of the remains of a large ceremonial house and at least seven smaller houses located on a low, bench promontory. Three midden heaps and three cache pits were tested and the site was mapped. No defensive ditch could be found. Pottery consisted of both Russell Ware and Thomas Riggs Ware. Site 39SL13 is likewise situated on a low bench promontory and consists of some 40 house depressions, including 2 large ceremonial houses but no defensive ditch was located. There, 3 house depressions were tested, and 1 midden heap, 10 cache pits, 2 fireplaces, and 8 other test pits excavated, and the site was mapped. Pottery consisted of Stanley Ware, Russell Ware, and Thomas Riggs Ware, and a few objects of historic origin were found. They are the only two sites in the Little Bend area that suggest occupation during the long, rectangular-house period.

Site 39SL19, located on the floodplain, was a compact village with deep depressions surrounded by a semicircular fortification ditch.

Tests were made in one midden heap, a cache pit, and eight other test pits, and the site was mapped. An extensive sample of Stanley Ware pottery was obtained. Site 39SL3, located on a low terrace, was a compact area of 26 house depressions but no evidence of a fortification ditch or large ceremonial house. Four houses were tested and three cache pits, three fireplaces, and a burial were excavated. The site was mapped. Pottery was of the Stanley Ware and some historic objects were recovered. Site 39SL28, located on the low brush promontory just east of 39SL12, consisted of one large ceremonial house depression and at least seven other smaller house depressions. One house was tested, four middens and two cache pits were excavated, and the site was mapped. Stanley Ware pottery predominated in the collections but some Russell Ware was also found. These three sites and the one multicomponent site listed in the Thomas Riggs group above were the only sites with a predominance of Stanley Ware pottery.

At the following sites Russell Ware pottery predominated. Site 39SL8, situated on a low terrace, represents a diffuse village of numerous house depressions. Three houses were tested, and one midden, three cache pits, one fireplace, and one test pit were excavated, and the site was mapped. Site 39SL30 consisted of two very shallow house depressions on a low terrace promontory. One house was tested, and two middens and a fireplace were excavated. A map was made of the site. Site 39SL24 was a small, compact village containing one large ceremonial house depression and at least five smaller depressions located on the low terrace above the floodplain. Four houses were tested, a midden, a fireplace, and a cache pit were excavated, and the site was mapped. Site 39SL202, the remains of another village situated on a low terrace above the floodplain, consisted of two rather large, ringed house depressions. Both houses were tested, two middens, and two fireplaces were excavated, and the site was mapped. Site 39SL36 contained only one very faint house depression on a high (or second) terrace and a small rock cairn. The house was tested, four middens and a fireplace were excavated, and the site was mapped. It was a small, poor site but some additional house depressions may have been present. Site 39SL50, newly located in 1959, consisted of two shallow house depressions on a small terrace promontory. One house was tested, a midden and a test pit were excavated, and the site was mapped. It was a small, unproductive site. Site 39SL23 consisted of a large ceremonial house depression and 17 smaller house depressions located on a high (or second) terrace above the floodplain. A considerable quantity of collared rim sherds were present in the collections. Three houses were tested, a midden, four cache pits, and two test pits were excavated, and the site was mapped. Site 39SL21 was a single house

depression and two rock cairns located on the high terrace. Tests of cairns were negative. The house was tested, two cache pits, a fireplace, and two test pits were excavated, and the site was mapped. Site 39SL22 was a large ceremonial house depression and three smaller depressions situated on the high terrace. One house was tested, two cache pits, a fireplace, and two test pits were excavated, and the site was mapped. Site 39SL20, consisting of two faint house depressions on the lower terrace, was a small site and not very productive. One house was tested, a midden, a cache pit, and two fireplaces were excavated, and the site was mapped. Site 39SL17 contained a large ceremonial house and six smaller depressions on the high terrace. Three houses were tested, two cache pits, a fireplace, and a test pit were excavated, and the site was mapped. Site 39SL16 was composed of three shallow house depressions and several other irregular depressions situated on the high terrace. Two houses were tested, a cache pit and a fireplace were excavated, and the site was mapped. This was a small and unproductive site. Site 39SL14 contained two house depressions on the high terrace adjacent to Site 39SL13. Both houses were tested, a midden was excavated, and the site was mapped. Site 39SL34, a single house depression on the high terrace and a part of the 39SL13 and 14 complex, was not productive. The house was tested, a midden was excavated, and the site was mapped.

Ten sites, newly located in 1959, consisted of only minor-find spots of specimens, random fire hearths, cache pits, and similar isolated features. None is of enough significance to warrant further attention, though surface collections and/or minor tests were made in all of them. These sites are 39SL47, 48, 49, 51, 52, 53, 54, 55, 56, and 57. Likewise, site 39SL25 was examined and written off as of no further interest. Thus by the end of the season tests had been made to provide architectural details for 36 circular earth lodges in 17 separate sites and excavations had been conducted in 25 middens, 33 cache pits, 16 fireplaces, and 26 random test pits. One burial was recovered and 19 sites were mapped. Houses were consistently tested by excavating a trapezoidal area on the depression edge with the base of the trapezoid (10-25 feet wide) just outside the house ring and the smaller base (5-10 feet) near the center. This gave maximal coverage of the house periphery. In many cases these tests were extended to the central fireplace, and where the wall post pattern seemed unsatisfactory the outer edge of the trapezoid was extended. The McNutt party completed its season's work on August 29, after 8½ weeks in the field.

The fourth River Basin Surveys party for the 1959 season was directed by Dr. Alfred W. Bowers. This crew of five began intensive excavations at the Anton Rygh site (39CA4), in Campbell County, South Dakota, on July 13, and continuing the investigations that were

carried on by Dr. Bowers during the previous two summers. The objective for this final season was the excavation of portions of the early, long-rectangular house component that underlay at least three later occupations of circular earth-lodge villages. This objective was only partially achieved. Portions of a rectangular house wall were uncovered, and a substantial series of early ceramic types of the Thomas Riggs-Huff sequence was collected. In addition to this, a major contribution to an understanding of this type of prehistoric site was made in the excavation of a sequence of fortifications and defensive structures especially equipped with bastions and "strong points." Two distinctive fortification systems separated by 4 to 5 feet of fill were identified. The upper one is associated with late Alaska material and represents one style of fortification in use in earliest historic times. The lower system is associated with the Thomas Riggs-Lower Fort Yates material of the rectangular house period of seven or eight centuries ago. The Bowers party completed its season's work on August 22, after six weeks in the field.

Two Missouri Basin Project field parties were in operation for brief periods during the winter months. In response to notification by the area engineer at Gavins Point Dam that an archeological site was being destroyed by wave action at Lewis and Clark Lake, Robert W. Neuman visited the site in company with Corps of Engineers personnel during the period December 2-5. Brief testing of the Miller Creek site (25KX15) demonstrated that it was a campsite of the period prior to the sedentary earth-lodge villages in the area and may be of considerable significance when excavated later in conjunction with proposed bank stabilization work by the Corps of Engineers. The fine cooperation of the Corps of Engineers staff was most helpful in this project. In addition to work at the Miller Creek site, Neuman visited a burial-mound group near Mitchell, S. Dak., where unauthorized digging had been reported, and found that one of the mounds had been destroyed. The landowner agreed to allow no further unauthorized excavation there. The trip was completed with a brief survey of the construction activities at the Big Bend Dam.

The second wintertime field party in the Missouri Basin also went to the Miller Creek site (25KX15). This was a cooperative project between the River Basin Surveys, the University of Nebraska Laboratory of Anthropology, and the Corps of Engineers, U.S. Army, at the Gavins Point Dam. The area engineer advised that bank-stabilization work would begin in the area of this site the week of February 15. During the period February 12-20, Robert W. Neuman, of the River Basin Surveys staff, and Thomas A. Witty, of the University of Nebraska Laboratory of Anthropology, excavated a portion of the site. They were assisted by the area engineer, the reservoir naturalist,

and the reservoir manager of the Gavins Point Dam. The Laboratory of Anthropology provided a part of the field expenses. This is another example of the outstandingly fine cooperation between various Federal and State agencies in the Inter-Agency Archeological Salvage Program. The Miller Creek site, on the right bank of Miller Creek at its confluence with the Missouri River in Knox County, Nebraska, is a prehistoric Indian campsite exposed at a depth of from 3 to 6 feet below the surface. Test trenches revealed a moderate quantity of artifacts including chopping tools, projectile points with and without side notches, and a few pottery fragments. The material relates the site to the Woodland cultures. In addition, a day was spent at a site on the South Dakota side of Lewis and Clark Lake, collecting some deeply buried bison bones that appear to be of an extinct species.

The 1960 summer field season in the Missouri Basin began in the Big Bend Reservoir area on June 8. Dr. Warren W. Caldwell and the party under his direction, prevented by heavy rains and unexpected high water from reaching its primary objective of sites in Old Armstrong County, Oahe Reservoir, temporarily transferred their activities for the early part of the season to the area about the mouth of Medicine Creek in Lyman County, South Dakota. By the end of the fiscal year Caldwell had a crew of eight men, and excavations were well underway at Sites 39LM222 and 39LM224, two small earth-lodge villages briefly tested in the 1959 season.

The second Missouri Basin Project field party starting work in June was under the direction of Robert W. Neuman. It was engaged in the excavation of a burial-mound site near the North Dakota-South Dakota State line, in the Oahe Reservoir area, Sioux County, North Dakota. This site, the Boundary Mound group (32SI1), consists of several burial mounds of the Plains Woodland period, and is one of the extensive series of Woodland mound sites in the Oahe Reservoir area scheduled for excavation by this party during the 1960 season. By the end of the year excavations at this site were nearly completed. Mr. Neuman and his crew of six men had cut extensive trenches across three of the mounds and had dug several test pits in other parts of the site.

The third Missouri Basin Project field party at work in June was a crew of three under the direction of G. Hubert Smith in the Oahe Reservoir area. This historic-sites party planned to begin digging on June 23 at the site of old Fort Bennett (39ST26) in Stanley County, South Dakota. When it reached that location, however, it found most of it already under water and a change was necessary. The party moved to Fort Sully (39SL45) in Sully County on the other side of the Missouri River, and on June 28 started an investigation of the foundations and refuse dumps at that historic military post in order to

verify several ground plans of the post and gather a representative series of specimen materials of the period.

Cooperating institutions working in the Missouri Basin at the beginning of the fiscal year included a party from the University of Kansas, directed by Dr. Carlyle S. Smith, excavating at the Stricker Village site (39LM1) in the Big Bend Reservoir and testing two nearby sites, 39LM226 and 39LM227; a joint party from the University of North Dakota and the State Historical Society of North Dakota, directed by Dr. James H. Howard, excavating at the Huff site (32MO11) in the Oahe Reservoir area; and two parties from the University of Missouri, directed by Dr. Carl F. Chapman, excavating a series of sites in the Pomme de Terre Reservoir area and making preliminary surveys in the Kassinger Bluff Reservoir area of west-central Missouri. In July and August, a party from the Kansas State Historical Society, under the direction of Roscoe Wilmeth, excavated one site and tested three others in the Pomona Reservoir area of east-central Kansas. In October a party from the University of South Dakota, directed by William Buckles, excavated a cemetery area at the Four Bears site (39DW2) in the Oahe Reservoir area of South Dakota. In April the Nebraska State Historical Society had a party, under the direction of Marvin F. Kivett, surveying sites in the Red Willow Reservoir in southwestern Nebraska. At the end of the fiscal year, four cooperating institutions had archeological crews in the field: The State Historical Society of North Dakota, at the Huff site (32MO11) in the Oahe Reservoir area, under the direction of W. Raymond Wood; the University of Nebraska, at the Leavenworth site (39CO9) in the Oahe Reservoir area, directed by Dr. Preston Holder; the University of Missouri, surveying and testing sites in the Kassinger Bluff Reservoir area, directed by Dr. Carl F. Chapman; and the Kansas State Historical Society, in the Wilson Reservoir area in central Kansas, directed by Roscoe Wilmeth. All these parties were operating through agreements with the National Park Service and were cooperating in the Smithsonian Institution research program.

During the time that the archeologists were not in the field, they were engaged in analysis of their materials and in laboratory and library research. They also prepared manuscripts of technical, scientific reports and wrote articles and papers of a more popular nature.

The Missouri Basin Chronology Program, started by the staff archeologists of the Missouri Basin Project in January of 1958, and described in the Seventy-sixth Annual Report of the Bureau of American Ethnology, continued to operate throughout the year. The program has continued to have marked success and the entire group of 34 individuals and 20 research institutions has continued to co-

operate in assembling data, under the general direction of the Missouri Basin Project staff members. Studies by Dr. Paul B. Sears of Yale University on the pollen samples collected last year have continued to progress, and at least one profile is being verified. Another group of 11 radioactive carbon-14 samples has been submitted to the University of Michigan Memorial Phoenix Laboratory, under the direction of Professor H. R. Crane, to add to the 11 dates already obtained on carbon-14 specimens. Plans for full-time participation by a dendrochronologist made little headway during the year but look promising for next year. On a part-time basis, the dendrochronologist, Harry E. Weakley, continued to prepare materials for study. Alan H. Coogan, though no longer a member of the River Basin Surveys staff, continued his studies of the geologic-climatic aspects of the chronology of the terrace-situated sites in the Fort Thompson region of the Big Bend Reservoir area. The 11 radiocarbon dates already obtained in the Missouri Basin Chronology Program are given in their relative temporal positions in table 1. The dendrochronological material is illustrated in plate 2, figure 1, and the soil profile of a site near Fort Thompson, S. Dak., is shown in plate 2, figure 2, to illustrate the geologic-climatic approach to the dating of archeological materials.

The laboratory and office staff spent its full effort during the year in processing specimen materials for study, photographing and illustrating specimens, preparing specimen records, and typing, filing, and illustrating records and manuscript materials. The accomplishments of the laboratory and office staff are listed in tables 2 and 3.

As of June 30, 1960, the Missouri Basin Project laboratory had cataloged 1,219,563 specimens from 2,097 numbered sites and 58 collections not assigned site numbers in the 14 years of its operation. It may be noted in table 2 that considerable material from the Chattahoochee River Basin was processed in the Missouri Basin Project laboratory this year. This reflects collaboration for expediency and economy between the archeological investigations outside the Missouri River Basin and the facilities for work within the Missouri Basin and constitutes a major contribution to the effectiveness of the salvage program in the southeastern United States. In addition to the processing of these specimens, the Missouri Basin Project facilities were utilized for a portion of the year in the preparation of maps, illustrations, and the three mimeographed appraisal reports resulting from the work in the Chattahoochee Basin last year. Without the aid of the Missouri Basin Project facilities these researches would not have progressed so rapidly.

The Missouri Basin Project staff archeologists and archeologists of the National Park Service and the cooperating State agencies working in the Missouri Basin met on July 24 in a roundtable field conference

Table 1.—Carbon-14 dates obtained by the Missouri Basin Chronology Program.

NEBRASKA	DATE (A.D.)	SOUTH DAKOTA
s. <u>Lynch Site</u> ; a village of square houses with rounded corners, in Boyd County Sample: charcoal from general digging; dates a late occupation. 250 ± 150 years old, or 1708 A.D. ± 150 years	-1800-	f. <u>Cheyenne River Site</u> (first occupation); a village of long, rectangular houses in Stanley County (Oahe Reservoir) Sample: burned house-post. 650 ± 200 years old, or 1308 A.D. ± 200 years
b. <u>Site 25FT70</u> ; a small cluster of square houses in Frontier County (Medicine Creek Reservoir) Sample: charcoal from a house floor. 500 ± 200 years old, or 1458 A.D. ± 200 years	-1700-	g. <u>Thomas Ridges Site</u> ; village of long, rectangular houses in Hughes County (Oahe Reservoir). Sample: burned house-post. 730 ± 200 years old, or 1228 A.D. ± 200 years
c. <u>Coufal Site</u> ; a village of square houses in Howard County. Sample: burned roof-support post from a house. 820 ± 200 years old, or 1138 A.D. ± 200 years	-1400-	h. <u>Dodd Site</u> (second occupation); a village of long, rectangular houses in Stanley County (Oahe Reservoir). Sample: partly burned wall-post from a house. 800 ± 200 years old, or 1158 A.D. ± 200 years
d. <u>Site 25FT18</u> ; a small cluster of houses with circular floor areas, in Frontier County (Medicine Creek Reservoir). Sample: charcoal from several posts and other features. 1130 ± 200 years old, or 828 A.D. ± 200 years	-1300-	i. <u>Crow Creek Site</u> (first occupation); two long, rectangular houses in Buffalo County (Fort Randall Reservoir). Sample: charcoal from two roof-support posts in one of the houses. 900 ± 200 years old, or 1058 A.D. ± 200 years
e. <u>Logan Creek Site</u> ; an ancient campsite in Burt County. No houses were found. Sample: charcoal from second level of site fill. 663 ± 300 years old, or 4674 B.C. ± 300 years	-1000-	j. <u>Swanson Site</u> ; a village of long, rectangular houses in Brule County (Fort Randall Reservoir). Sample: burned wall-post from one of the houses. 1100 ± 250 years old, or 358 A.D. ± 250 years
	-800-	k. <u>Breden Site</u> (first occupation); village of long, rectangular houses in Stanley County (Oahe Reservoir). Sample: charcoal found in a storage pit in a house. 1240 ± 150 years old, or 719 A.D. ± 150 years
	-700-	
	-600-	

TABLE 2.—*Specimens processed July 1, 1959—June 30, 1960*

Reservoir	Number of sites	Catalog numbers assigned	Number of specimens processed
MISSOURI BASIN PROJECT			
Big Bend	17	404	1, 357
Fort Randall	1	7	20
Oahe	50	5, 098	43, 437
Sites not in reservoirs	3	9	26
	71	5, 518	44, 840
Collections not assigned site numbers	3	5	5
Total		5, 523	44, 845

CHATTahoochee BASIN

Columbia Dam	33	4, 053	30, 161
Walter F. George	282	5, 170	65, 779
Oliver	11	128	2, 968
Sites not in reservoirs	2	83	1, 254
	328	9, 434	100, 162
Collections not assigned site numbers	1	29	138
Total		9, 463	100, 300
Combined totals	399	14, 986	145, 145

TABLE 3.—*Record material processed July 1, 1959—June 30, 1960*

MISSOURI BASIN PROJECT

Reflex copies of records	10, 299
Photographic negatives made	1, 781
Photographic prints made	9, 945
Photographic prints mounted and filed	3, 654
Transparencies mounted in glass	283
Kodachrome pictures taken	454
Plate layouts made for manuscripts	69
Cartographic tracings and draftings	50
Artifacts sketched	44
Plates lettered	37
Profiles drawn	36

in Pierre, S. Dak. This 16½th Plains Conference, now a regular summer event, and an adjunct of the annual autumnal Plains Conferences, was devoted to discussions of basic technical problems arising from current field activities. They centered principally around the sequences of cultural groupings in this area and the interrelationships between the several cultural manifestations represented by excavated materials. During the Thanksgiving weekend, members of the staff participated in the 17th Plains Conference for Archeology, held in Lincoln. On April 23, members of the staff took part in the Seventieth Annual Meeting of the Nebraska Academy of Sciences, held also in Lincoln.

Dr. Robert L. Stephenson, chief, devoted considerable time to managing the office and laboratory in Lincoln and preparing plans and budgets for the 1960 field season. He also worked on a summary report of the Missouri Basin Salvage Program for the calendar years 1952-60, and on a complete revision of a large technical monograph, "The Accokeek Creek Site: A Middle Atlantic Seaboard Culture Sequence," previously accepted as his doctoral dissertation at the University of Michigan. He began preparation of an article, "Administration in Anthropology," and started preliminary analysis of the materials he recovered from the excavations at the Sully site (39SL4) in the Oahe Reservoir in 1956 to 1958. He also continued writing on the manuscript reporting the "Archeological Investigations in the Whitney Reservoir, Texas." Throughout the year he served as chairman of the Missouri Basin Chronology Program. In July he served as chairman of the 16½th Plains Conference held in Pierre, S. Dak., and during the Thanksgiving weekend served as general chairman for the 17th Plains Conference held in Lincoln, Nebr. He was a panel discussant for "The Texas Panhandle and the Southwest" in the session on "Plains-Southwest Relationships," and presented an exhibit of "The History of the Plains Conference" at that meeting. On January 20 and 21, he participated in the annual meeting of the Committee for the Recovery of Archeological Remains, held in Washington, D.C., and on April 23, he attended the Seventieth Annual Meeting of the Nebraska Academy of Sciences in Lincoln, presenting a paper on "A Ceramic Dichotomy" which was published in abstract in the *Proceedings of the Nebraska Academy of Sciences*. During the year he prepared a book review of "The Cougar Mountain Cave," by John Cowles, for publication in *American Antiquity*, and a book review of "Archeology of Coastal North Carolina," by William Haag, for publication in *Ethnohistory*. He also gave nine talks on various aspects of Missouri Basin Salvage Archeology at the regular meetings of local civic organizations and three talks to local school groups in Lincoln. On

March 1, he became assistant editor of *Notes and News in the Plains Area*, for *American Antiquity*, and on April 29, was appointed associate editor for the *Plains Anthropologist*. Taking annual leave, he served as part-time assistant professor of anthropology on the faculty of the University of Nebraska during the second semester of the academic year (February to June) and taught an upper-division course, "Prehistory of North America."

Dr. Warren W. Caldwell, archeologist, when not in charge of field parties, devoted most of his time to analyses of specimen materials he had recovered from salvage excavations in previous years. He completed preliminary analysis of the ceramics and certain other artifacts from the Black Partizan site (39LM218) which he excavated in the Big Bend Reservoir in 1958. He reanalyzed the artifacts and data from the Hickey Brothers site (39LM4), excavated by Bernard Golden of the Missouri Basin Project staff in 1958, and in collaboration with Lee G. Madison and Bernard Golden completed the final manuscript, including figures and illustrations, "Archeological Investigations at the Hickey Brothers Site (39LM4), Big Bend Reservoir, South Dakota." He reanalyzed the artifacts and stratigraphic data from the Wakemap Mound site (45KL26), and prepared introductory chapters for the final report on the excavations there; completed the final revision of the report, "Archeological Investigations in the Hell's Canyon Area, Snake River, Oregon and Idaho"; revised and completed the manuscripts and illustrations for a popular photographic booklet, "Lewis and Clark Lake," which was published by the Corps of Engineers, U.S. Department of the Army, Omaha, Nebr., in January. In collaboration with Charles H. McNutt and G. Hubert Smith, he contributed chapters to, edited, and completed final revision of a similar popular booklet, "Fort Randall Reservoir." The latter was submitted to the Corps of Engineers in Omaha for publication. He revised three manuscripts of short articles pertaining to firearms in the Plains: "Preliminary Notes on Fragments of Firearms and Related Objects from Fort Atkinson, 1820-1827," "Firearms and Related Materials from Fort Pierre II (39ST217), Oahe Reservoir, South Dakota," and "Comments on the 'English Pattern' Trade Rifle." They were submitted for publication in the *Missouri Archeologist*. Other manuscripts and publications completed by him this year were: "The Black Partizan Site, A Preliminary Anaylsis," accepted for publication in the *Plains Anthropologist*; review of "Stone Age on the Columbia," by Emory Strong, accepted for publication in *Archeology*; review of "Archeological Explorations in Central and South Idaho, 1958," by Earl H. Swanson, Jr., Donald R. Tuohy, and Alan Bryan, accepted for publication in *American Antiquity*; "Pacific Coast Clay Figurines: A Contraview," published

in the *Davidson Journal of Anthropology*, vol. 3, No. 2; and a mimeographed statement issued by the Missouri Basin Project, "Missouri Basin Project, Progress Report No. 4." On July 24, he participated in the 16½th Plains Conference in Pierre, S. Dak., and November 26-28 attended the 17th Plains Conference for Archeology in Lincoln, where he served as chairman of the session on "Field Reports" and presented a paper, "Excavations in the Lower Brule-Good Soldier Creek Area, Big Bend Reservoir." On April 23 he presented a paper, "Clay Figurines in the Prehistory of the Northwest," before the Nebraska Academy of Sciences in Lincoln. It was published in abstract in the *Proceedings* of the Academy. During the year he continued to serve as chairman of the dendrochronology section of the Missouri Basin Chronology Program. In February, he accepted appointment as collaborator for the Plains area for *Abstracts of New World Archeology*, and in April accepted appointment as assistant editor for Reviews and Literature for the *Plains Anthropologist*. In March he addressed the Sigma Gamma Epsilon, national earth-sciences honorary, on "The Smithsonian Institution and the Archeological Salvage Program." On annual-leave time, he served as part-time assistant professor of anthropology on the faculty of the University of Nebraska during the second semester of the academic year (February to June) and taught a lower-division course, "The American Indian."

Dr. Charles H. McNutt, archeologist, when not in the field conducting archeological excavations, spent much of his time in studying materials he had obtained in previous seasons and in the preparation of reports on the results of those excavations. He attended and participated in the 16½th Plains Conference in Pierre in July, and the 17th Plains Conference for Archeology in Lincoln in November. At the latter he presented two papers, "The Thomas Riggs Focus, Additional Data" and "Comments on Two Southwestern Pottery Types." In April he attended the Seventieth Annual Meeting of the Nebraska Academy of Sciences and presented a paper, "Comments on Prehistoric Contacts between the Southwestern United States and the Areas to the East." It was published in abstract in the *Proceedings* of the Academy. In September he prepared an article, "The Missouri Basin Chronology Program," which appeared in the *Progress Report* of the Interior Missouri Basin Field Committee for October-December 1959. In January he collaborated with Warren W. Caldwell and G. Hubert Smith in the preparation of a popular photographic booklet, "Fort Randall Reservoir," to be published by the Corps of Engineers, Omaha. Throughout the year he served as chairman of the carbon-14 section of the Missouri Basin Chronology Program. During the course of the year he completed manuscripts on "The Okobojo

Creek Site (39SL9), Oahe Reservoir," "The Ziltener Site (39SL10), Oahe Reservoir," "The Nolz Site (39SL40), Oahe Reservoir," and "The Glasshoff Site (39SL42), Oahe Reservoir." He also completed the final draft of the report, "The C. B. Smith Site (39SL29), Oahe Reservoir." All five of these are now ready for publication. In addition, he completed the artifact analyses and portions of the manuscripts of reports of work at the "Sully School Site (39SL7), Oahe Reservoir" and "The Zimmerman Site (39SL41), Oahe Reservoir." On his own time during the second semester of the academic year (February to June), he served as part-time assistant professor of anthropology on the faculty of the University of Nebraska and taught a lower-division course, "World Ethnology." On May 27, he resigned from the River Basin Surveys to accept a teaching position at the University of Tennessee.

William M. Bass III, temporary physical anthropologist, attended and participated in the 16½th Plains Conference in Pierre and after completion of his fieldwork resigned on August 28. During the remainder of the year he devoted much of his own time to study of the data collected in the field and to statistical analyses of the measurements taken on the human skeletal material from the Plains. These data will provide the basis for his doctoral dissertation at the University of Pennsylvania and also for an extensive handbook on the physical anthropology of the Plains Indians.

William N. Irving spent the months of July and August in the Lincoln laboratory completing a first draft of a technical report on his excavations at the Medicine Crow site (39BF2) in the Big Bend Reservoir area. He resigned on September 4 to continue his studies toward a doctorate at the University of Wisconsin.

Dr. Alfred W. Bowers, temporary archeologist, attended and participated in the 16½th Plains Conference in Pierre in July. He resigned on August 28 to return to his regular position as professor of anthropology at the University of Idaho. During the course of the year he devoted a portion of his time to analysis of the archeological materials he had excavated during the past three summers at the Anton Rygh site (39CA4) in the Oahe Reservoir.

Robert W. Neuman, archeologist, when not engaged in field activities, turned his attention to analysis and interpretation of archeological materials from sites he had previously excavated in the Big Bend Reservoir area of South Dakota. He completed a manuscript "The Truman Mound Site (39BF224), Big Bend Reservoir Area, South Dakota" and a brief article on "Representative Porcupine Quill Flatteners from the Central United States," both of which were accepted for publication in *American Antiquity*. He prepared and published a brief article in the *Florida Anthropologist* entitled "Two Unrecorded Pottery Vessels from the Purcell Landing Site, Henry

County, Alabama." He completed the analysis of specimen materials and prepared final drafts of two manuscripts reporting sites he had excavated in the 1958 and 1959 seasons: "The Good Soldier Creek Site (39LM238), Lyman County, South Dakota" and "Two Sites in the Fort Thompson Area, Big Bend Reservoir, South Dakota." The former deals with a stratified site of Plains Woodland occupation overlain by a Mississippian component. The latter reports the investigations at a burial mound site of Plains Woodland context and at a multicomponent village site. In November he attended the 17th Plains Conference for Archeology in Lincoln, and in April he presented a paper, "Burial Patterns in Mounds of the Big Bend Area, Central South Dakota," at the Seventieth Annual Meeting of the Nebraska Academy of Sciences in Lincoln. This paper was published in abstract in the *Proceedings* of the Academy. In March he was elected to full membership in the Society of the Sigma Xi and was initiated in May. At the end of the year he was again in the field in charge of a crew excavating burial mounds in the Oahe Reservoir area.

G. Hubert Smith, archeologist, was on duty at the Lincoln office most of the year. In July he participated in the 16½th Plains Conference in Pierre, and in November he attended the 17th Plains Conference for Archeology in Lincoln, serving as a discussant in a panel forum on "Plains Ethnohistory." He visited the State Historical Society of North Dakota in Bismarck during the period November 9-14 for the purpose of examining and borrowing field notes and specimens pertaining to the large technical manuscript he is preparing on the combined researches at the site of Fort Berthold and Like-a-Fishhook Village (32ML2). The work on this report on four seasons of investigation by three separate State and Federal agencies at this site occupied Mr. Smith the major part of the year. It was about two-thirds completed by June 30, 1960. On April 2, he was lent to the National Park Service at Colonial National Historical Park, Yorktown, Va., where he conducted excavations at the site of an early 18th-century dwelling and completed a comprehensive technical report of the results. In April he contributed a paper, in absentia, on "Historical Archeology in Missouri Basin Reservoir Areas; Current Investigations" for the Twentieth Annual Meeting of the Nebraska Academy of Sciences. It was published in abstract in the *Proceedings* of the Academy and was accepted for publication in its entirety in the *Plains Anthropologist*. As previously mentioned, he collaborated with Caldwell and McNutt in the preparation of a popular booklet on "Fort Randall Reservoir." He wrote a review of "The Indian Journals of Lewis Henry Morgan—1859-1862," edited by Leslie A. White, which was accepted for publication in *Nebraska History*. In March he was elected to full membership in the Society of the Sigma Xi, and initiated, in absentia, in May. He returned to his duties in

Lincoln on June 1 and began preparations for the summer fieldwork. At the end of the year he was conducting investigations in historic sites in the Oahe Reservoir area.

West Virginia.—A survey of the Sutton Reservoir (Cleveland M. Bailey Reservoir) on the Elk River in West Virginia was made during the period October 8-19. With the helpful cooperation of the Corps of Engineers the entire area was covered on foot and by vehicle and no archeological manifestations were found. This was one of the few areas investigated where no further work would be required.

Cooperating institutions.—In addition to the institutions and agencies previously mentioned in the sections pertaining to Alabama-Georgia and Missouri Basin, a number of others cooperated in the Inter-Agency Salvage Program in several areas throughout the United States. The University of Arkansas made an archeological survey in the Beaver Reservoir area on the White River and carried on geological and paleontological investigations in the Greers Ferry Reservoir basin on the Little Red River. The University of Arizona continued its excavations in the Painted Rock project area on the Gila River. The Northern Arizona Museum of Science and Art made additional studies relating to the archeology, geology, flora, and fauna of the Glen Canyon project in the lower Colorado and San Juan Rivers. Southern Illinois University made a series of excavations in the Carlyle Reservoir basin on the Kaskaskia River in Illinois. The University of Kentucky conducted excavations in the Barkley Reservoir area on the Cumberland River and at the Barren No. 2 project on the Barren River. It also conducted a survey of 22 small Federal projects scattered over the State of Kentucky. The University of Missouri carried on investigations in the Joanna Reservoir area on the Salt River in the Upper Mississippi Basin. The Museum of New Mexico again worked in the Navaho project area along the San Juan River. The University of North Carolina conducted surveys and excavations in the Wilkesboro Reservoir area on the Yadkin River. San Francisco State College conducted excavations at the Black Butte project on Stony Creek and in the San Luis Reservoir area above the juncture of San Luis and Cottonwood Creeks in Merced County, California. The University of Oregon continued its series of excavations in the John Day Reservoir area on the John Day River in the Columbia basin. Nevada State Museum made a survey of the Peavine Mountain Water Shed project in Nevada, and Washington State College carried on additional excavations in the Ice Harbor Reservoir area on the Snake River. The University of Texas made surveys in the Proctor Reservoir area on the Brazos River, the Navarro Mills project on Richland Creek, and the proposed reservoir areas on Flat Creek, Farmers' Creek, and Champion Creek. In addition it conducted

excavations at the Ferrell's Bridge project on Cypress Creek at the Whitney Reservoir on the Brazos River and in the Diablo Reservoir region along the Rio Grande. It also investigated remains in the Canyon and Iron Bridge project areas. East Texas State College made paleontological surveys in the Iron Bridge area along the Sabine River and the Panhandle-Plains Museum made surveys in the Greenbelt Reservoir area. The University of Utah continued its excavations in the upper portions of the Glen Canyon Reservoir area on the Colorado River.

During the year various local groups and institutions continued to cooperate in the salvage program on a voluntary basis. They were mainly in Pennsylvania, New York State, Ohio, Indiana, Tennessee, and southern California.

ARCHIVES

The Bureau Archives continued during the year under the custody of Mrs. Margaret C. Blaker. On November 14 Mrs. Blaker attended meetings of the American Indian Ethnohistoric Conference in New York City and while returning to Washington she spent three days in Philadelphia examining pictorial and manuscript collections relating to American Indians in the American Philosophical Society Library and in the Historical Society of Pennsylvania.

MANUSCRIPT COLLECTIONS

The Bureau's manuscript collections continue to be utilized by anthropologists and other students. About 285 manuscripts were consulted by searchers, of whom 60 visited the archives in person and 28 purchased reproductions totaling 2,346 pages. Some 350 manuscripts were referred to by the archivist in obtaining information for 90 mail inquiries. In the course of this examination, new and more detailed descriptive lists of manuscripts were also prepared and are available for distribution in response to specific inquiries.

The papers of Alice Cunningham Fletcher and her adopted son, Francis La Flesche, which had been deposited on loan in 1955 by Mrs. G. David Pearlman of Washington, D.C., were donated by Mrs. Pearlman in 1959 in memory of her husband, G. David Pearlman. During the year just ended this collection was arranged and cataloged by Nicholas S. Hopkins, summer intern. The collection occupies 36 boxes. In addition to correspondence and other personal papers of both Fletcher and La Flesche, there is extensive ethnographic material relating to the Omaha, Osage, Pawnee, Dakota, and Nez Perce tribes, with smaller amounts on the Winnebago, the Indians of Alaska, and a number of other North American tribes. Much of this material has not been published, and should be helpful

to anyone studying those tribes. A 20-page outline of the subject matter of the collection has been prepared, and further information will be provided on request.

PHOTOGRAPHIC COLLECTIONS

Requests by scholars, publishers, and the general public for ethnographic photographs from the Bureau's collection continue to increase. The year's total of 604 purchase orders and written and personal inquiries concerning photographs is considerably greater than last year's total of 504, and the 1,983 prints distributed during the year through purchase, gift, and exchange represented a marked increase over the 1,208 of the previous year.

As a result of new lists describing specific portions of the photographic collections that are frequently being prepared, much information about available photographs is gradually being distributed, with a corresponding increase in the distribution of photographs. At present about 110 lists have been prepared describing series of photographs relating to individual tribes or subjects. Since these are in typed form only, they are not distributed as complete sets, but copies of the relevant ones are sent in response to specific inquiries.

The Bureau's files of photographs are constantly growing through the generosity and thoughtfulness of interested individuals who either lend their personal collections for copying or present them as gifts. For example, a series of 160 photographic prints relating to the Northern Cheyenne Sun Dances of 1958 and 1959, and to the moving and opening of the Sacred Buffalo Hat bundle in 1958 and 1959, were made from negatives taken and lent by Mrs. Margot Liberty of Birney, Mont. The Bureau's set of prints is available for reference by students, but until 1970 purchase orders for copies will be referred to Mrs. Liberty who retains the negatives.

Arrangements were made by Dr. William C. Sturtevant for borrowing and copying 69 photographs relating to the Florida Seminole taken during the first quarter of the 20th century. They were from the following collections in Florida: Collier Development Corporation, Everglades; the P. K. Yonge Library of Florida History, University of Florida, Gainesville; the Willson-Cantrell Collection, University of Miami Library, Miami; and the personal collections of Frank A. Robinson, Robinson Galleries, Miami; Dr. Charlton W. Tebeau, Miami; and Mrs. M. K. Ashworth, Coral Gables.

Daguerreotypes of Eleazer Williams, Mohawk, and John O'Brien Skenondough, probably an Oneida, made by Mathew Brady in 1853 and owned by the Long Island Historical Society, Brooklyn, New York, were lent for copying through the courtesy of Miss Helen Bolman, librarian of the Society.

Nine photographs relating to various North American Indian tribes and two made by T. H. O'Sullivan in Colombia in 1870 while on the Darien Expedition under Commander Selfridge were lent for copying by James Tubbesing of Winchester, Va.

A collection of 33 photographs relating to St. Francis Mission, Rosebud Agency, South Dakota, and to other Dakota Indian agencies, including portraits of agency personnel, Indian police, students, and agency buildings, were received as a gift from Richard A. Pohrt of Flint, Mich. Eleven photographs by J. N. Choate pertaining to the Carlisle Indian School, Carlisle, Pa., were also donated by Mr. Pohrt.

Nine photographs of Spanish Mission churches in the Southwest and Mexico were donated by George B. Eckhart, Tucson, Ariz.

A large group photograph of a number of Ute Indians who were camping in the Garden of the Gods, Colorado, in 1913 was received as a gift from Dr. Sidney Margolin of Denver, Colo.

An important collection of 312 glass negatives consisting of individual and group portraits of Indian delegates to Washington photographed by C. M. Bell in the period 1874-1890 was purchased from W. T. Boyce of Washington, D.C. Bell's photographic work was well known to his contemporaries, and a cartoon in *Leslie's Weekly* for September 10, 1881, carries the legend, "Photographing an Indian Delegation, in Bell's Studio, for the Government." In recent years, with the exception of a small series of negatives in the Bureau of American Ethnology uncertainly attributed to him (an attribution now confirmed), Bell's Indian photographs have been little known or used, and the whereabouts of his negatives was not known. The plates have not as yet been individually cataloged, but the following tribes are among those represented: Arapaho, Blackfoot, Cheyenne, Chippewa, Comanche, Dakota, Hidatsa, Sauk and Fox, and some of the Plateau tribes.

With the assistance of Kiowa friends and relatives, Dr. Everett R. Rhoades of Oklahoma City, Okla., identified a number of Kiowa portraits in the Bureau files. Father Peter Powell of Chicago, with the aid of John Stands-in-Timber and other Cheyennes, provided identifications and biographical notes on certain Cheyenne photographs. During a visit to the archives William Hall, a Winnebago of Black River Falls, Wis., gave information about a number of Winnebago photographs.

ILLUSTRATIONS

The Bureau's staff artist, E. G. Schumacher, continued to do a wide variety of illustrating for Bureau and other publications of the Smithsonian Institution. In addition, he made text drawings for articles written by staff members on various topics to be issued in local,

national, and foreign periodicals. Most of the illustrations were of an archeological nature, although there was a sizable cross section of scientific and technical art material undertaken. Approximately 379 halftone plates were mounted, revised, restored, retouched and/or lettered, 237 text illustrations drawn, and 66 charts, diagrams, and graphs prepared.

EDITORIAL WORK AND PUBLICATIONS

The Bureau's editorial work continued during the year under the immediate direction of Mrs. Eloise B. Edelen. There were issued one Annual Report and five Bulletins, as follows:

Seventy-sixth Annual Report of the Bureau of American Ethnology, 1958-59. ii + 41 pp., 4 pls. 1960.

Bulletin 143, vol. 7. Index to the Handbook of South American Indians. vi + 286 pp. 1959.

Bulletin 172. The story of a Tlingit community: A problem in the relationship between archeological, ethnological, and historical methods, by Frederica de Laguna. x + 254 pp., 11 pls., 18 figs. 1960.

Bulletin 173. Anthropological Papers Nos. 57-62. iii + 498, 61 pls., 37 figs., 2 maps. 1960.

No. 57. Preceramic and ceramic cultural patterns in northwest Virginia, by C. G. Holland.

No. 58. An introduction to Plains Apache archeology—the Dismal River Aspect, by James H. Gunnerson.

No. 59. The use of the atlatl on Lake Patzcuaro, Michoacan, by M. W. Stirling.

No. 60. A Caroline Islands script, by Saul H. Riesenber and Shigeru Kaneshiro.

No. 61. Dakota winter counts as a source of Plains history, by James H. Howard.

No. 62. Stone tipi rings in north-central Montana and the adjacent portion of Alberta, Canada: Their historical, ethnological, and archeological aspects, by Thomas F. Kehoe.

Bulletin 174. An introduction to Kansas archeology, by Waldo R. Wedel. With description of the skeletal remains from Doniphan and Scott Counties, Kansas, by T. D. Stewart. xvii+723 pp., 97 pls., 109 figs. 1959.

Bulletin 177. Archeological investigations in British Guiana, by Clifford Evans and Betty J. Meggers, xxi+418 pp., 68 pls., 127 figs. 1960.

Publications distributed totaled 31,547, as compared with 27,721 for the fiscal year 1959.

COLLECTIONS

The following collections were made by staff members of the Bureau of American Ethnology or of the River Basin Surveys and transferred to the permanent collections of the department of anthropology and the department of zoology, U.S. National Museum:

FROM BUREAU OF AMERICAN ETHNOLOGY

Acc. No.

228466. 318 items of archeological materials from La Venta, Tabasco, Mexico, collected by Robert F. Heizer, Philip Drucker, and Robert J. Squier in 1955.

228740. 183 items of archeological material from Colville River drainage area, northern Alaska, collected by U.S. Geological Survey members, 1949-1950. Reported and turned over to Ralph S. Solecki for transfer.

228741. 351 items of archeological material from along Kukpukruk and Kokolik Rivers, Alaska, collected by Ralph S. Solecki, 1949.

FROM RIVER BASIN SURVEYS

221942. 5 fresh-water mussels from Hughes County, S. Dak., collected by Richard Wheeler and Harold A. Huscher in 1958.

226498, 228124, 228919, 229853, 229854, 229855, 229856, 229857, 229861, 229862, 230198, 230201, 230203, 230204. Archeological and human skeletal material collected in Oahe Reservoir, Campbell, Stanley, and Sully Counties, S. Dak.

229858, 229859, 229860, 230200. Indian skeletal material from Big Bend Reservoir, Buffalo and Lynn Counties, S. Dak.

230199. Indian skeletal material from Gavins Point Reservoir, Yankton City, S. Dak.

230202. Indian skeletal material from Jamestown Reservoir, Stutsman City, N. Dak.

MISCELLANEOUS

On January 27, 1960, Miss Jean E. Carter was appointed temporarily as museum aide and assigned to the Bureau Archives. She resigned effective May 4, 1960, and on May 23 Mrs. Caroline R. Cohen was appointed for a 3-month period to fill the vacancy. Raymond E. Machoian was also engaged for three months to assist with the cleaning, sorting, and processing of archeological materials excavated at Russell Cave, Alabama.

Dr. John P. Harrington, Dr. A. J. Waring, and Sister Inez Hilger continued as research associates. Dr. M. W. Stirling, also a research associate, continued to use the Bureau laboratory in completing reports on fieldwork undertaken while he was Director of the Bureau.

The following bibliographies and leaflets were issued during the fiscal year:

SIL-65, 2d rev., 10/59: Introductory bibliography on the American Indian. 6 pp.

SIL-230, 9/59: Selected references on American Indian basketry. Compiled by William C. Sturtevant. 7 pp.

SIL-231, 8/59: Bibliography of wild food plants of United States Indians. Prepared by F. R. Irvine. 26 pp.

SIL-234, 10/59: Selected references on North American Indian clothing. Compiled by William C. Sturtevant. 4 pp.

SIL-240, 10/59: Manuscript collection, Bureau of American Ethnology Archives.
1 p.

SIL-242, 11/59: Selected references on federal Indian policy and administration. Compiled by William C. Sturtevant. 10 pp.

A new bibliographic series titled "Smithsonian Anthropological Bibliographies" was inaugurated under the auspices of Dr. William C. Sturtevant of the Bureau staff. This will include bibliographies of varying length and technicality, both areal and topical, in all fields of anthropology, and will be distributed to those requesting it. It is hoped that individuals not affiliated with the Smithsonian Institution who have prepared bibliographies for class use or other purposes which might be of general usefulness will submit them to the Bureau for consideration. No. 1 of the series is "Selected References on the Plains Indians," 36 pages, multilithed, compiled by John C. Ewers. As in other recent Bureau bibliographies, this one includes recordings of music, sources of illustrations, a list of museums where noteworthy Plains Indian collections are on exhibition, an index to the references according to tribe, and an index of the tribes according to State.

An increase of 885 letters over last year brought the total number of inquiries about the American Indians received in the Director's office during the year to 3,644. In addition, staff members received many letters of a semiofficial nature, but these were not officially recorded. Leaflets and other printed materials were sent in answer to many of the inquiries, while information was supplied to others by staff members. More than 13,000 informational items, including printed and typescript articles, bibliographies, and several hundred photographic lists, were sent out in response to requests for such materials. Numerous specimens either brought to the office or sent by mail were identified for owners and data supplied on them.

Respectfully submitted.

FRANK H. H. ROBERTS, JR., *Director.*

DR. LEONARD CARMICHAEL,
Secretary, Smithsonian Institution.



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Seventy-eighth Annual Report

of the

BUREAU OF AMERICAN ETHNOLOGY



1960-1961



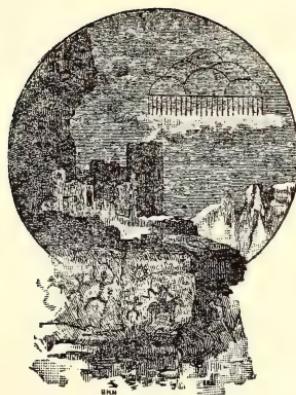
SMITHSONIAN INSTITUTION
WASHINGTON
D.C.

SEVENTY-EIGHTH
ANNUAL REPORT OF THE

BUREAU OF
AMERICAN ETHNOLOGY

TO THE SECRETARY OF THE
SMITHSONIAN INSTITUTION

1960-1961



UNITED STATES
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BUREAU OF AMERICAN ETHNOLOGY

June 30, 1961

Director.—FRANK H. H. ROBERTS, Jr.

Anthropologists.—HENRY B. COLLINS, WILLIAM C. STURTEVANT,
WALLACE L. CHAFE.

Research Associates.—JOHN P. HARRINGTON, SISTER M. INEZ
HILGER, MATTHEW W. STIRLING, A. J. WARING, Jr.

Archivist.—MRS. MARGARET C. BLAKER.

Scientific illustrator.—E. G. SCHUMACHER.

Administrative assistant.—MRS. JESSIE S. SHAW.

RIVER BASIN SURVEYS

Director.—FRANK H. H. ROBERTS, Jr.

Chief, Missouri Basin Project.—ROBERT L. STEPHENSON.

Archeologists.—WARREN W. CALDWELL, HAROLD A. HUSCHER,
CARL F. MILLER, ROBERT W. NEUMAN, G. HUBERT SMITH.

SEVENTY-EIGHTH ANNUAL REPORT
OF THE
BUREAU OF AMERICAN ETHNOLOGY

FRANK H. H. ROBERTS, JR. *Director*

SIR: I have the honor to submit the following report on the field researches, office work, and other operations of the Bureau of American Ethnology during the fiscal year ended June 30, 1961, conducted in accordance with the act of Congress of April 10, 1928, as amended August 22, 1949, which directs the Bureau "to continue independently or in cooperation anthropological researches among the American Indians and the natives of lands under the jurisdiction or protection of the United States and the excavation and preservation of archeologic remains."

SYSTEMATIC RESEARCHES

Dr. Frank H. H. Roberts, Jr., Director of the Bureau, devoted a portion of the year to general supervision of the activities of the Bureau and the River Basin Surveys. In midsummer he inspected the work of excavating parties operating in the Big Bend and Oahe Reservoir areas in South Dakota and a portion of the Oahe Basin in North Dakota, as well as a field party working in the Wilson Reservoir area in Kansas. Three of the parties represented the River Basin Surveys and three were from cooperating agencies. In addition, Dr. Roberts visited one excavation that was not a part of the salvage program. The work at that location consisted of investigations in the remains of Fort Kearney, Nebr., a historic army post being studied by the Nebraska State Historical Society. During part of the trip Dr. Roberts was accompanied by Dr. John M. Corbett and Carroll A. Burroughs of the Washington office of the National Park Service, and during the entire trip by Paul L. Beaubien, regional archeologist, Region Three, National Park Service. While at Pierre, S. Dak., the group took part in an informal conference attended by leaders of all the parties and many of their student helpers working in the Plains during the summer. A wide range of archeological problems in the Missouri Basin was discussed.

In September Dr. Roberts went to Mesa Verde National Park where he served as chairman of the Advisory Group for the Wetherill Mesa Project, a cooperative undertaking between the National Park Service and the National Geographic Society. The group spent 3 days discussing and inspecting the excavations underway in two large cliff ruins and studied the operations of the field laboratory handling

the materials recovered during the digging. Recommendations were made pertaining to the continuance of the investigations and improvements in the handling and cataloging of specimens.

In November Dr. Roberts went to Norman, Okla., to attend the Plains Conference for Archeology and participate in discussions relating to the history of the Indians in that general area.

Early in April at Mule Creek, Wyo., Dr. Roberts made arrangements for establishing a camp and starting a series of excavations in a Paleo-Indian site—a cooperative project between the National Geographic Society and the Smithsonian Institution. Upon the completion of these activities he proceeded to Lawton, Okla., where he was the principal speaker at the dedication of the Museum for the Great Plains on April 9. Returning to the Washington office, he began preparations for sending a field party to the site at Mule Creek and in that connection left Washington early in June for Lincoln, Nebr., where he was joined by Dr. William M. Bass, who was to be the chief field assistant, and several other members of the party. They picked up two vehicles and field equipment and proceeded to Mule Creek to set up camp, and on June 12 began excavations. Dr. Roberts remained with the party until June 19. The party, however, continued operations under Dr. Bass and was busy digging at the end of the fiscal year. As a result of the work up to that time an extensive deposit of bison bones, probably representing an extinct species, and a number of artifacts have been recovered. The site is one that dates about 9,000 years ago.

Dr. Roberts completed a manuscript, "The Agate Basin Complex," which is to be published in Mexico in a volume containing articles about the Paleo-Indian. He also did the technical editing of a series of seven reports on archeological excavations and studies in three reservoir areas, to appear in Bulletin 185 of the Bureau of American Ethnology.

At the beginning of the fiscal year, Dr. Henry B. Collins, anthropologist, was in Europe studying collections in the principal museums and attending two international anthropological congresses. He visited Lascaux and a number of other Paleolithic cave and rock shelter sites in the Dordogne region of France and examined Megalithic sites and monuments in the Morbihan and Finistere districts of Brittany. Dr. Collins attended the 34th International Congress of Americanists in Vienna, July 18-25, and the 6th International Congress of Anthropological and Ethnological Sciences in Paris, July 30-August 6. At the latter he presented a paper discussing the present status of evidence bearing on the origin of Eskimo culture.

Dr. Collins continued to participate in the activities of the Arctic Institute of North America as a member of its Board of Governors, as a member of the Publications Committee that supervises prepara-

tion of the journal *Arctic* and two other publication series, and of the Research Committee that plans and supervises the Institute's extensive program of Arctic research. He also continued to serve as chairman of the Directing Committee responsible for preparation of the Arctic Institute's *Arctic Bibliography*, a comprehensive work which abstracts and indexes the contents of publications in all fields of science, and in all languages, pertaining to the Arctic and sub-Arctic regions of the world. Volume 9 of *Arctic Bibliography* (1,599 pages), containing abstracts of 7,192 scientific publications on the Arctic, was published in September 1960. Of the publications abstracted in this volume, 3,170 had appeared in English, 2,548 in Russian, 790 in Swedish, Norwegian, and Danish, 338 in German, and 346 in other languages. Volume 10, similar in size and content to volume 9, is in press, and work is proceeding on volume 11.

The project which Dr. Collins organized last year for the purpose of translating Russian publications on the archeology, ethnology, and physical anthropology of northern Eurasia made progress under the editorship of Dr. Henry N. Michael of Temple University. The first volume to be completed is S. I. Rudenko's "The Ancient Culture of the Bering Sea Area and the Eskimo Problem," the only comprehensive Russian work on the archeology of northeastern Siberia. It is now in press and will appear as the first number in a special publication series of the Arctic Institute of North America. The Advisory Committee, of which Dr. Collins is chairman, has selected material—monographs and shorter papers—for five additional volumes which are now being translated. The work is being carried out with the support of a grant from the National Science Foundation.

Dr. Collins prepared a paper on the interrelationships of early Eskimo and pre-Eskimo cultures in Alaska, Canada, and Greenland and their affinities with Temperate Zone cultures in America and Asia to be published in a volume of the *Special Publications* series of the Arctic Institute of North America, and another paper on the environmental factors involved in the origin and development of Eskimo culture in the American Arctic.

Dr. William C. Sturtevant, ethnologist, spent July and August 1960 in Europe. He attended the 34th International Congress of Americanists in Vienna and the 6th International Congress of Anthropological and Ethnological Sciences in Paris. The remainder of the period was spent in museum research. In 11 museums of England, Austria, France, the Netherlands, and Sweden Dr. Sturtevant studied several hundred early specimens collected from eastern North American Indians. He located, described, and photographed many important specimens and collections, mostly from the northeast—there are surprisingly few early southeastern specimens in Europe. To one familiar with collections in the United States the number and good

condition of early northeastern Indian objects in Europe are striking.

A secondary objective of Dr. Sturtevant's study in Europe was a search for possible European prototypes of modern eastern North American Indian artifacts. Although he visited seven museums of peasant and folklore materials, this project was less successful than the first, both because of time limitations and because European collecting and research in some important categories of artifacts (e.g., basketry) are insufficiently developed.

In November 1960, Dr. Sturtevant attended an informal conference on Iroquois research in New Haven, Conn., the annual meeting of the Southern Historical Association in Tulsa, Okla. (where he delivered a paper on "History, Ethnohistory, and Folk History: Seminole Examples"), and the American Indian Ethnohistoric Conference in Bloomington, Ind. He also visited several museums and archival collections in Oklahoma City, Norman, and Tulsa. There are several important collections of southeastern Indian artifacts and documents in Oklahoma.

Dr. Sturtevant also continued his research on various tribes of eastern North America. His paper "The Significance of Ethnological Similarities between Southeastern North America and the Antilles" was issued as Yale University Publications in Anthropology No. 64 (1960), and shorter comments by him appeared in Bureau of American Ethnology Bulletin 180 and in *Current Anthropology*, vol. 2, No. 3 (both 1961). A somewhat revised version of his "Anthropology as a Career" (Smithsonian Publication 4343) was issued October 7, 1960.

Dr. Wallace L. Chafe, linguist, completed work on two manuscripts. One of them, "Seneca Thanksgiving Rituals," which is in press as Bureau of American Ethnology Bulletin 183, contains important Seneca religious texts, as well as transcriptions of the music that accompanies one of the rituals. The other, "Handbook of the Seneca Language," a nontechnical description of Seneca orthography and grammar with an extensive glossary of Seneca terms encountered in the anthropological literature, will be published as a Bulletin of the New York State Museum. Dr. Chafe also continued the preparation of a Seneca dictionary.

Beginning in October, Dr. Chafe mailed over 600 questionnaires in a survey of the approximate numbers and ages of speakers of the extant North American Indian languages. These were addressed to individuals who have had contact with the various Indian groups. The responses have been numerous and informative, and efforts are now being made to fill in the gaps. Fieldwork for the project is being conducted in cooperation with the American Philosophical Society.

Dr. Chafe spent considerable time throughout the year processing Arikara and Caddo linguistic material already collected and preparing

to do further fieldwork on Caddo. He was also fortunate in being able to do some work with a speaker of Oklahoma Cherokee living in Washington.

RIVER BASIN SURVEYS

The River Basin Surveys, a unit of the Bureau of American Ethnology organized to cooperate with the National Park Service and the Bureau of Reclamation of the Department of the Interior and the Corps of Engineers of the Department of the Army in the Inter-Agency Archeological and Paleontological Salvage Program, continued its activities throughout the year. Attention was directed to areas that are to be flooded or otherwise destroyed by the construction of large dams in the various river systems of the United States. The year's investigations were supported by a transfer of \$123,895 from the National Park Service to the Smithsonian Institution. Of that sum, \$103,895 was for work in the Missouri Basin and \$20,000 for studies along the Chattahoochee River in Alabama and Georgia. On July 1, 1960, the Missouri Basin Project had a carryover of \$9,420, and that, with the new appropriation, provided a total of \$113,315 for the Missouri Basin Project. The grand total of funds available in 1960-61 for the River Basin Surveys was \$133,315.

Activities in the field were mainly concerned with excavations, although there were some limited surveys in two areas. The funds available for the last fiscal year were slightly greater than those for the preceding one, but because of increased costs there was little gain in the amount of work accomplished. On July 1, 1960, there were three excavating parties working in the Missouri Basin in South Dakota. One of them was digging sites in the Big Bend Reservoir area, and the other two were working in the Oahe Reservoir area farther north. The Missouri Basin parties completed their field activities the latter part of August and returned to the headquarters at Lincoln, Nebr.

In September a party resumed explorations and excavations along the Chattahoochee River in Alabama and subsequently extended its efforts to the Georgia side of the river in the Walter F. George Reservoir area. Work continued there until the end of December. During October a small party spent a brief period investigating a site that was being destroyed by gravel operations in the upper reaches of the Big Bend Reservoir area in South Dakota and also collected material from the immediate construction areas of the Big Bend Dam.

The 1961 field season got under way in May, when a small party went to the Merritt Reservoir area in Nebraska to make a final check on possible archeological manifestations at that location. Two previous surveys there had failed to reveal cultural materials, but it was thought that because of shifting sand dunes and construction activities something previously missed might have been uncovered. Nothing

of that nature was found, and the party moved to the Big Bend area in South Dakota where it was expanded and began a series of excavations in some burial mounds. A second party went to the Big Bend area on June 13 and started excavations in a large village site on the west side of the river 4 miles above the dam site. A third party started working on the west side of the Missouri River in the Oahe Reservoir Basin on June 19. It was digging in a large village site located about 5 miles south of Mobridge, S. Dak. All three parties had the season's program well under way and were busily digging at the close of the fiscal year. During the fiscal year, 11 parties representing institutions cooperating in the Missouri Basin program worked in four reservoir areas in Kansas, Nebraska, and South Dakota. There were 24 parties from cooperating institutions working in other basins throughout the country.

As of June 30, 1961, the River Basin Surveys had carried on reconnaissance work or had excavated in 255 reservoir basins located in 29 States. In addition, two lock projects and four canal areas have been examined. During the years since the program got under way 4,952 sites have been located and recorded, and of that number 1,157 were recommended for excavation or limited testing. Because complete excavation has not been possible in any but a few exceptionally small ones, when the term "excavation" is used it implies digging only as much of a site as is thought essential to provide a reasonable sample of the materials and information to be found there. Preliminary appraisal reports have been issued for most of the reservoir areas which were surveyed. In some cases no archeological manifestations were noted and no general report was issued. During the past fiscal year no new reconnaissance work was undertaken and no such reports were distributed.

By the end of the fiscal year, 519 sites in 54 reservoir areas located in 19 different States had either been tested or dug sufficiently to provide good information about them. The sites in which digging has been done cover a wide range of cultural characteristics. Some of them pertain to early hunting and gathering peoples of about 10,000 years ago, while others represent communities lived in by early historic Indians and the remains of frontier, army, and trading posts of European origin. Between the two extremes are a series of sites attributable to sedentary horticultural groups extending from approximately the 6th to the 13th centuries A.D.

Reports on the work have been published in the Smithsonian Institution Miscellaneous Collections, in Bulletins of the Bureau of American Ethnology, and in various scientific journals and historical quarterlies. Bulletin 176, containing River Basin Surveys Papers Nos. 15-20, was distributed in December 1960. These papers consist of a series of reports on historic sites excavated in the Garrison, Oahe,

and Fort Randall Reservoir areas in North and South Dakota. Bulletin 179, containing River Basin Surveys Papers Nos. 21-24, a series of reports on work in Texas, Iowa, and along the Columbia River, is in proof form and should be distributed in the early part of the next fiscal year. The papers in that Bulletin were listed in the report for 1959-60 and need no further comment here. During the year, River Basin Surveys Paper No. 25, a report on the "Archeology of the John H. Kerr Reservoir Basin, Roanoke River, Virginia-North Carolina," by Carl F. Miller, was sent to the printer and will appear as Bulletin 182. Another series of River Basin Surveys Papers, Nos. 26-32, to comprise Bulletin 185, was edited and sent to the printer in June. These reports are: "Small Sites in and about Fort Berthold Indian Reservation, Garrison Reservoir, North Dakota" and "Star Village: A Fortified Historic Arikara Site in Mercer County, North Dakota," by George Metcalf; "The Dance Hall of the Santee Bottoms on the Fort Berthold Reservation, Garrison Reservoir, North Dakota," by Donald D. Hartle; "Crow-Flies-High (32MZ1), a Historic Hidatsa Village in the Garrison Reservoir Area, North Dakota," by Carling Malouf; "The Stutsman Focus: An Aboriginal Culture Complex in the Jamestown Reservoir Area, North Dakota," by Richard P. Wheeler; "Archeological Manifestations in the Toole County Section of the Tiber Reservoir Basin, Montana," by Carl F. Miller; "Archeological Salvage Investigations in the Lovewell Reservoir Area, Kansas," by Robert W. Neuman.

The figures showing the distribution of reservoir projects throughout the country and those in which excavations have been made did not change during the current fiscal year and for that reason need not be repeated. Readers desiring that information can obtain it by referring to the Bureau's 77th Annual Report, for the fiscal year 1959-60. The excavations conducted during the present fiscal year were all in reservoir areas previously listed. Figures pertaining to the work done by State and local institutions under agreements with the National Park Service have not been included in recent reports because complete information about them is not available in the River Basin Surveys office.

The River Basin Surveys received helpful cooperation throughout the year from the National Park Service, the Bureau of Reclamation, the Corps of Engineers and other army personnel, and from various State and local institutions. The field personnel of all the cooperating agencies assisted the party leaders in numerous ways, and in all areas the relationship was excellent. Both in Washington and in the field the National Park Service continued to serve as a liaison between the various agencies. It also was responsible for the preparation of estimates and justifications for the funds needed to carry on the salvage program. The Commanding Officer at Fort Benning

in Georgia provided valuable assistance in numerous ways while investigations were being made in the portion of the Walter F. George Reservoir basin which lies in the Fort Benning Reservation. In addition, the Georgia Historical Commission, the University of Georgia, and various local clubs and groups of citizens in both Alabama and Georgia assisted the leader of the River Basin Surveys party while he was working along the Chattahoochee River. In the Missouri Basin the project engineers for the Oahe Reservoir provided space for temporary living accommodations and also for the storage of equipment. In a number of cases the construction agency lent mechanical equipment which was most helpful in the stripping of the topsoil from sites and the backfilling of trenches and test pits. In the Missouri Basin the Corps of Engineers also cooperated with the staff of the Missouri Basin Project of the River Basin Surveys in the preparation of a number of small informative pamphlets telling about several of the reservoirs along the Missouri River.

General supervision of the program was from the main office in Washington, but the activities in the Missouri Basin operated from the field headquarters and laboratory at Lincoln, Nebr. At the beginning of the year the latter provided office assistance and some equipment for the Chattahoochee River Project, but subsequently most of that activity was transferred to the main office in Washington. The Lincoln laboratory processed all the materials collected by excavating parties in the Missouri Basin and also some of those from the Chattahoochee.

Washington office.—Dr. Frank H. H. Roberts, Jr., continued to direct the main headquarters of the River Basin Surveys at the Bureau of American Ethnology throughout the year. Carl F. Miller, archeologist, was based at that office and from time to time assisted the Director in some of the general administrative problems. Harold A. Huscher, archeologist, worked under the general supervision of the Washington office, but at the beginning of the fiscal year was based on the field headquarters for the Missouri Basin Project at Lincoln, Nebr. After completing his field activities along the Chattahoochee River, Alabama-Georgia, in late December, he joined the Washington office and continued to work there the remainder of the fiscal year.

Mr. Miller spent the entire time in the Washington office working on materials and data he had collected during previous seasons in the field. He spoke before various groups interested in archeological subjects and answered numerous inquiries pertaining to artifacts and cultural materials from the southeastern archeological area. He also identified artifacts from 15 collections of southeastern material. In October he attended the sessions of the Eastern States Archeological Federation in Toronto, Canada, and in May he presented a paper on

"The Archeology of the Clarksville Site, 44 Mc 14, Mecklenburg County, Virginia," before a joint session of the Archeological Societies of Virginia and North Carolina held at Clarksville. He completed a short paper, "The Physical Structure of Rock Mound at 9 ST 3, Georgia," which was published in *Southern Indian Studies*, vol. 11, pp. 16-19. Mr. Miller furnished data that were used in the preparation of the "Ethnological Map of Virginia," which was published by Hearn Brothers, Detroit, Mich.

At the beginning of the fiscal year Harold A. Huscher, while on annual leave, assisted Dr. Richard G. Forbis, Glenbow Foundation, Calgary, Alberta, in the excavation of the remains of a fortified earth-lodge village at Cluny in the Blackfoot Reserve on the Bow River about 65 miles east of Calgary. Returning from Canada he drove south by way of the front ranges and the high plains, visiting a number of the more important Early Man-type sites, such as those at Sage-creek and Agate Basin in Wyoming, Dent and Apex Spring in Colorado, and Homo Novusmundus in New Mexico. In mid-August he returned to duty at Lincoln, Nebr., where he made preparations for resuming the archeological investigations in the Walter F. George Dam and Lock area along the Chattahoochee River. Shortly after his arrival at Eufaula, Ala., at the end of August, he started his fieldwork. After returning to the Washington office in January he devoted his time to bringing up to date the several years' backlog of maps and field notes pertaining to the Chattahoochee investigations. In May the processed collections of the two previous years' fieldwork in Alabama-Georgia were moved from Lincoln to Washington for storage at the U.S. National Museum, and Mr. Huscher proceeded to combine that material with the collections he had made during the current season. At the close of the fiscal year he was busy selecting bone and shell specimens and items pertaining to the early colonial period for identification by various Smithsonian specialists.

Alabama-Georgia.—During the period from mid-September to the end of December Harold A. Huscher, using a power-driven screen of $\frac{3}{8}$ -inch mesh and a small crew of local laborers, tested a series of 15 sites below Eufaula, Ala., in the southwestern quadrant of the Walter F. George Reservoir Basin. Most of the sites fall into two general classes. The first group consists of those with a predominance of Mississippian pottery, characterized by the early Mississippian globular pots with loop handles, comparable to the Macon Plateau types in Georgia and the Gordon types in Tennessee. Such pottery actually has a long time span, continuing down to the opening of the historic period (Pinellas, Fort Walton). The second group includes sites with an overlay of late Creek pottery such as the Chattahoochee Brushed variants and Kasihta Red-film in association with trade metal, china, and glass.

Most major sites in this reservoir, however, are proving to be in the multiple-component category with several time levels represented. The stratification is usually gradational rather than sharply demarcated, hence the digging is by arbitrary levels. At sites favorably located on the terrace points near stream junctions, underlying Early Woodland and Archaic manifestations usually will be definitely identifiable, though not sharply separable, at depths of 2.0-5.0 feet below the present surface. The following are the most important sites investigated during the fall season:

The Spann's Landing site, 1HE34, is located in Alabama 3 miles above the dam axis, in a loop of the Chattahoochee River opposite Grace's Bend, and a little more than a mile below the Mandeville Mound site (1CLA1)¹ in Clay County, Ga. This site extends for more than 800 feet along the crest of a low natural levee, with the greatest concentration of material at the north or upstream end. A series of 14 squares 10-x-10 feet were laid out there in two rows, so spaced as to give an adequately distributed sampling. Of the 14 squares, 8 pits were actually dug, to varying depths down to 5.0 feet. There is a sparse overlay of brushed pottery, indicating some use of the area during the Late Creek period, but the most intense occupation was during Mississippian times, and probably fairly early Mississippian times, as indicated by the pottery remains. One productive cache pit yielded parts of several pots of the Pinellas arcaded ware ("pumpkin pot," "melon pot"), a type described from Florida and attributed to a late peripheral Mississippian manifestation. It is, however, considered diagnostic of a possibly earlier Mississippian period as described by Caldwell for the great Rood's Landing site (9SW1), 30 miles farther north, and the Mississippian cap on the large Mandeville Mound (Stark's Clay Landing, 9CLA1), as reported by McMichael and Kellar. Along the Chattahoochee the arcaded pots with temper and handle variants may have a much longer time range, apparently continuous, than in Florida, extending back to the earlier Macon Plateau period, with the Singer-Moye site (9SW2), south of Lumpkin on the headwaters of Pataula Creek, one of the earliest major sites. At depths of 2.5-4.0 feet below the present surface at Spann's Landing, fiber-tempered pottery comparable to the Stallings Island and Orange Plain types of the latest Archaic and earliest

¹ Site designations used by the River Basin Surveys are trinomial in character, consisting of symbols for State, County, and site. The State is indicated by the first number, according to the numerical position of the State name in an alphabetical list of the United States; thus, for example, 32 indicates North Dakota, 39 indicates South Dakota. Counties are designated by a two-letter abbreviation; for example, ME for Mercer County, MN for Mountrall County, etc. The final number refers to the specific site within the indicated State and County.

Woodland occurred consistently, as well as early point types, the latter regularly consisting of the decomposed flint first described from the Macon area by Kelly.

1HE51, a site in Alabama at the junction of Hardridge Creek and the Chattahoochee River, 2.5 miles above the dam axis, was tested by six 10-foot squares, ranging in depth down to 5 feet. The predominant occupation there was Early Woodland, with fiber-tempered, Deptford, and Swift Creek pottery types recognized. However, no productive pit area was located. A number of large, heavy-stemmed projectile points, again in the decomposed flint characteristic of the Archaic in this area, were recovered from the deeper levels. Several less important sites near Hardridge Creek were tested by from one to six 10-foot squares, to obtain a broad spectrum sample of the range of pottery in the area. One site, 1HE56, yielded a number of sherds of all-over fingernail-incised pottery, the only site where this specialty has risen to a significant frequency.

Somewhat farther north, between White Oak and Cheneyhatchee Creeks, another series of sites was tested in order to check on exposures of Chattahoochee Brushed pottery, since a Late Creek village, Okitiyakni, had supposedly been somewhere in the general area. 1BR46, 47, and 2A were found to yield significant amounts of brushed pottery, and one area of pits was located at 46. There a large fragment of a restorable pot, which agrees closely with published descriptions of the Late Creek ware from the Southeast and from Oklahoma, was found in direct association with trade metal. Eleven squares in all were dug at these sites, but no structural remains were identified. Eight 10-x-10-foot squares were dug at five other nearby locations, but information recovered was less important. One site at the south side of Barbour Creek (1BR10) was checked by four 10-x-10-foot squares, and consistently found to yield Gulf Woodland forms, some in direct association with a level of basin-shaped hearths. One of the latter was filled with irregular fist-sized fragments of burned clay, possibly fired for use as cooking "stones" or to provide pottery temper.

In November 1960 an immediate salvage job became necessary on Hatcheechubbee Creek, in Russell County, Ala., some 17 miles north of Eufaula, where a highway relocation project was destroying an Early Woodland site, 1RU74. Known as the Kite site, it was discovered in 1959 by Sergeant David W. Chase. It lay on a point of terrace between the creek and a small unnamed spring branch from the north. There four 10-foot squares were laid out parallel to the right-of-way and taken down to depths up to 5 feet. The upper layers yielded several types of Early Woodland sherds of the Deptford and Swift Creek series, and a considerable range of thick fiber-tempered sherds (Stallings, Orange) was obtained at slightly lower

levels. A series of stone artifacts was obtained in the deeper part of the tests. They consisted of the very characteristic decomposed flint of the Archaic. Several burned rock areas were noted, but no pits were found. The site, though not rich, was interesting in that there was much less intrusion from above, with the close mixing of time periods that makes some of the larger, more productive sites so confusing.

Beginning November 19, the remaining time was devoted to work on two mound sites. Trenched previously, they were 9QU1, and 9QU5, south of Georgetown, Ga., in Quitman County.

9QU1, Moore's "Mounds near Georgetown, Quitman County, Georgia" (Mounds of Lower Chattahoochee and Lower Flint Rivers, Journ. Acad. Nat. Sci. Philadelphia, 2d ser. vol. 13, pt. 3, pp. 426-456, 448), locally called the "Gary's Fishpond Mound" or the "Gary's Fishpond Site," consists of extensive village remains and a large low mound, now almost completely plowed down and carried away. The site was tested in the spring of 1960 by digging a T-trench along the east margin of the mound, and seven 10-x-10-foot trenches in the adjacent village areas. Although actually only the roots of the mound are left, it appeared desirable to attempt to determine more exactly the period of its building. Since the outwash apron of the mound was found to be intact, it seemed the site offered an opportunity for getting direct separation of mound, mound fill, and pre-mound periods, with the additional prospect of locating separate pits or features that would give individual "pure" samples.

The original grid was reset and a larger area in the western half of the mound remnants was stripped, revealing the roots of a circular mound faced with clay. It probably was originally about 200 feet in circumference at the base. A section trench cut through the western margin revealed that the clay facing had been carefully built up at a steep angle. The actual base of the mound was about 4 feet below the present surface in this area. A palisade of spaced large-diameter posts followed just outside the curve of this clay wall, but the posts did not appear to have been set into the wall. The indications were of some sort of a clay-faced "caracol" type mound. Additional bedding lines outside the circular periphery indicated a possibility that some kind of overlying rectangular mound had been built on the core of the original circular mound. An area 20-x-20 feet was excavated in mottled fill in the calculated center of the circular mound revealing numbers of post holes in interrupted alignments, running NW.-SE. and NE.-SW., though no clearly defined structure could be made out. Because of increasing inclemency of the weather the planned excavation of this center pit down into the submound could not be completed in the available time and the site was closed down.

However, additional work is certainly indicated for that location and will be scheduled for the early part of the new field season.

Several lots of midden excavated in the central 20-x-20-foot pit contain a high frequency of a carefully finished plain ware with thickened rims and no handles. This does not seem to be the local Weeden Island type, but may be evidence of contacts with or an actual occupation of the site by Early Mississippian peoples carrying a culture somewhat like that which becomes Coles Creek and Moundville farther west. If such were the case, the overlying rectangular structure would then relate to the later Fort Walton-Lamar period which seems to account for the greater part of the pottery from this site. The one recognizable structural pattern found, other than the mound, was located in the nearby village and consisted of large post holes at spaced intervals, outlining a corner and two adjacent walls of what was probably a house of the later period.

Additional work was done at 9QU5, a site referred to locally as the "Mound on the Lower Lampley Place" or the "Mound below Cool Branch." For brevity the site and mound will be referred to as the "Cool Branch Mound Site." This site had been tested previously by a 5-foot trench from the east margin to the approximate center of the mound. The mound proper was built of basket-loaded clay, apparently at one single stage of building, and there was a submound post-hole pattern indicating some sort of premound building.

Thirteen additional 10-x-10-foot test pits were dug at this site, eight in an east-west line across the north margin, paralleling the edge of the terrace, and five bracketing the mound proper. Using a tractor scraper, the surface of the mound was stripped, revealing the approximate edges of a regular rectangular clay-platform mound, with the corners oriented to the cardinal points. The mound was then bulldozed away to a level approximately 0.5 foot above the contact of the clay mound with the underlying river-silt surface of the terrace, as determined in the previous trenching. The center of the mound was then cleared by hand shoveling, revealing the post holes of a rectangular submound structure of closely set posts, corners closed, approximately 27-x-36 feet over all. This building was oriented with the overlying mound, though lying partly outside the baseline on the northwest side. As nearly as could be determined from the bulldozed surface without actually tracing out the lines by shoveling, the southwest margin being the least certain, the original base dimensions of the mound were about 55-x-55 feet. At the center of the submound structure was a pile of red iron ore (hematite) probably representing a symbolic ceremonial fire. The sand beneath was stained red but did not seem actually to have been burned. Two beautiful spud celts, one of a fine-grained greenstone, were found together in the mound fill about a foot above the contact. Both had been broken by the bulldozer.

dozing. The spud is commonly found in Mississippian mound sites westward to the Mississippi River.

A 5-x-10-foot test below the actual submound level revealed wall trenches of a rectangular open-cornered building, oriented NE.-SW., and in one of the series of 10-x-10-foot trenches, 75 feet southeast of the main mound, a straight section of wall trench was found. These features could not be examined further in the time available. Another test 400 feet northwest of the mound center and about 100 feet back from the terrace edge, also uncovered a house-wall trench at depths of 1.5 to 2.0 feet. Using a tractor, about a thousand square feet were stripped, tracing out the wall lines, but time did not permit complete study of the patterns. Rectangular, open-cornered houses, closely spaced but apparently not adjoining, were arranged in rows running NE.-SW. Hearths appeared to be in the forecourt to the southeast, rather than within the houses. No clearly defined occupation floor could be identified, hence the associations are not certain. Most of the pottery from that part of the site seems earlier than the houses, which presumably slightly antedate the mound, but continue into the mound period, since there is no evidence of a later house type. House evidence is so difficult to obtain along the Chattahoochee River, however, that negative evidence cannot be relied upon, and the known house areas at this site should be excavated further to get as complete house plan evidence as possible.

During the field season parties from the University of Alabama and the University of Georgia, under agreements with the National Park Service, also worked at sites in the Walter F. George Reservoir area.

Missouri River Basin—For the fifteenth consecutive year the Missouri Basin Project continued to operate from the field headquarters and laboratory in Lincoln, Nebr. Dr. Robert L. Stephenson served as chief of the project throughout the year. Activities included surveys, excavations, analysis of materials, and reporting on results. During the summer months the work was mainly concerned with excavations. Analyses and preparation of reports received the major attention throughout the other months of the year. The special chronology program begun in January 1958 continued to receive attention.

At the beginning of the fiscal year the permanent staff, in addition to the chief, consisted of 3 archeologists, 1 administrative assistant, 1 clerk-stenographer, 1 illustrator, 1 file clerk on the permanent staff, and 12 crewmen on the temporary staff. One paleontologist, on loan from the National Park Service, was added to the temporary staff for a month for the purpose of analyzing nonhuman bone material from the sites excavated over the past three seasons. In June, 2 assistant field archeologists, 1 cook, and 25 field crewmen were added to the temporary staff.



1. Use of power screen speeds testing of sites in Walter F. George Reservoir area, Alabama. River Basin Surveys.



2. Tracing bottom edge of large mound along Chattahoochee River in Georgia. River Basin Surveys.



1. Floor pit for rectangular earth lodge in Oahe Reservoir area, South Dakota. Remains of posts are visible along left wall. River Basin Surveys.



2. Excavating base of low mound in Oahe Reservoir area in North Dakota. Bison remains buried with human bodies may be seen at left. Traces of logs at right cover human skeletons. River Basin Surveys.

At the end of the fiscal year there were 3 archeologists in addition to the chief, 1 administrative assistant, 1 administrative clerk, 1 secretary, 1 scientific illustrator, 1 photographer, and 4 museum aides on the permanent staff, and 2 assistant field archeologists, 1 cook, and 25 field crewmen on the temporary staff.

During the year there were 10 Smithsonian Institution River Basin Surveys field parties at work in the Missouri Basin. Three of these were in the Oahe Reservoir area and two were in the Big Bend Reservoir area of South Dakota during July and August. One small field party conducted investigations during October and November in the Big Bend Reservoir area. One party investigated the Merritt Reservoir area in Nebraska during May and June. Two parties were excavating in the Big Bend Reservoir area and one in the Oahe Reservoir area during June.

Other fieldwork in the Missouri Basin during the year included 11 parties from State institutions operating under cooperative agreements with the National Park Service and in cooperation with the Smithsonian Institution in the Inter-Agency Archeological Salvage Program.

There was a slight increase in appropriated funds for fiscal year 1961, but since most of the new money was to cover wage-scale increases beginning in July, the fiscal situation brought into even sharper focus than before the critical problem of accomplishing the minimum necessary salvage at a time when two of the largest reservoirs, Big Bend and Oahe, were nearing completion and, in fact, Oahe was beginning to flood some of the important unexcavated archeological sites. However, when the parties took to the field in June it was possible to shift the methods of fieldwork from sampling of large numbers of sites back to the intensive excavation of a smaller number of key sites. The sampling techniques of the preceding two field seasons had been successful but some of the more intensive excavations were again needed.

At the beginning of the fiscal year, Dr. Warren W. Caldwell and a crew of eight were engaged in minor test excavations at two sites in the Big Bend Reservoir of South Dakota. Site 39LM222, near the mouth of Medicine Creek, in Lyman County, was a diffuse village of the La Roche complex. A small, circular house with closely spaced wall posts, four center posts, and a long entry passage, lay just above an earlier structure of indeterminate pattern. A shallow ditch surrounding the deeper house suggested that the house itself may have formed a bastion, or strong point, in the fortification system. Segments of both superimposed houses were excavated. Portions of a third house were also dug and it proved to have been a small, circular building differing little in structural details from the uppermost of the two superimposed houses. Pottery and other artifacts were

homogenous throughout the site, indicating a single La Roche-Iona-Russell Ware tradition and but one occupation. This would place the village in the late sedentary-farmer period of the 15th to 17th centuries. The second site of the group, 39LM224, is located but a mile downstream from 39LM222, and represented another La Roche village of diffuse pattern, but with only four houses apparent from the surface. One of them, a burned circular structure with widely spaced wall posts and long entry passage was partially excavated.

On July 19, Dr. Caldwell moved to the Oahe Reservoir area in old Armstrong County (now a part of Dewey County), above the mouth of the Cheyenne River on the west bank of the Missouri, and hired a new crew of laborers. The Oahe Reservoir, already beginning to flood, had begun to cover some of the sites in that vicinity. One of those still above water was site 39AR201, the remains of a large compact village of 18 long-rectangular houses placed in rows but without apparent fortifications. The remnants of one of the structures were excavated and other tests were made in the site. This extremely long, narrow house had been nearly twice as long as it was wide and its ruins were covered by 4.5 feet of overburden. There had been a low bench along the rear wall into which a shallow trench had been dug to receive the rear wall posts. Dentalium, native copper, and abundant human bone scraps lay on the floor and an ochre-covered human bundle burial associated with a bison skull was found in the southeast corner. Pottery was consistently Thomas Riggs Ware. This site represented a village of the Thomas Riggs Focus of middle-period sedentary farmers in the Missouri Valley and may date from the 15th century. Less than 500 yards downstream the remains of another large Thomas Riggs village, site 39AR210, were tested and found to resemble 39AR201 in all respects except that there had been a rectangular, bastioned fortification system. This site had been flooded by the Oahe Reservoir and reexposed by a drop in the water level. Recovery of archeological details was minimal, owing to their having been obscured by the flood waters, but a good artifact sample was collected. The Caldwell party completed the season's work after 9 weeks in the field.

The third River Basin Surveys party in the field at the beginning of the year, consisting of a crew of six under the direction of Robert W. Neuman, was excavating at the Boundary Mound site (32SI1) on the North Dakota-South Dakota boundary line in the Oahe Reservoir area, Sioux County, N. Dak. The site consisted of four dome-shaped burial mounds, ranging from 3 to 5 feet in height and 60 to 80 feet in diameter. Three of the mounds were excavated. Each contained a rectangular central burial pit covered with timbers and lined with matting. Bison remains (skulls, partial skeletons, and complete skeletons in articulation) were found around the timbers. The burial

pits were 3 to 4½ feet deep and contained from 6 to 14 secondary human burials, the bones of several being coated with red pigment. Artifacts were generally associated with a single individual in each pit. They included side-notched projectile points, triangular knives, bipointed drills, an obsidian end scraper, sandstone atlatl weights, a catlinite object, cigar-shaped bone objects, tubular bone beads, bone awls, a bone pendant, a bear canine pendant, shell pendants, and worked human mandibles as well as those from dogs and beaver. This mound group comprised burial tumuli of the Woodland period with relationships to the east and southeast of the area. They probably date from the period of 1,500 years ago and earlier.

The Neuman party continued investigations in other burial-mound sites along the right bank of the Missouri River between Mandan, N. Dak., and Mobridge, S. Dak. Site 32M0207 is a group of three mounds in Morton County, N. Dak., some 20 miles south of Mandan. One of them was excavated but yielded only a single secondary human burial and no artifacts. The Schmidt site (32M020) is a group of eight burial mounds 12 miles south of Mandan in Morton County. One mound, 75 feet in diameter and 1.3 feet high, was excavated. It contained a single secondary human burial in a rectangular, central, timber-covered burial pit. Articulated bison bones lay near the charred timbers that had covered the pit. The only artifacts recovered were a few fragmentary stone tools from the surface near one of the unexcavated mounds. The Swift Bird site (39DW233) is a group of two burial mounds and three shallow, circular depressions. One of the mounds, 70 feet in diameter and 3 feet high, was excavated. A single primary burial lay on the mound floor. Artifacts associated with the burial include dentalium beads, a tubular bone bead, and a shell pendant in the shape of a thunderbird. It is of interest to note that no pottery was found in association with any of these burial mounds. The Neuman party completed the season's work on September 1, after 12 weeks in the field.

The fourth Missouri Basin Project field party at work at the beginning of the fiscal year was a crew of three, under the direction of G. Hubert Smith, investigating historic sites in the Oahe Reservoir area. Activities at the site of Fort Sully (39SL45) in Sully County consisted of excavations of building foundations and refuse dumps and latrine pits in several parts of the site. Pits dug near the hospital and the barroom locations were particularly informative. The excavations provided detailed outlines of some of the main structures of this military post of the 1866-94 period. They also produced one of the largest known collections, obtained under controlled conditions, of military and civil objects of this period. Especially noteworthy is a large array of glassware, including "art glass," hundreds of bottles, medical-department glassware, and household glass. Many of these objects

are complete or little damaged and are marked as to origin or purpose. Objects of earthenware in great quantity, including Oriental earthenware, and numerous items of metal and leather were recovered. Strictly military objects are in the minority but unusual items of both military and civilian use will form a valuable comparative collection and future exhibit material. Even specimens of printer's type, for printing official orders, were found.

Investigations at the site of Fort Bennett (1870-91) in Stanley County, directly opposite Fort Sully, having been abandoned in June owing to flooding by the Oahe Reservoir, were resumed in August when the pool level had receded somewhat. The site was uncovered but the ground was so thoroughly waterlogged that excavation was impractical. Photographs were taken for record purposes and some historic specimens were collected. The experience gained there, as at other flooded sites, clearly emphasizes the hopelessness, in a great majority of cases, of trying to do archeological work in sites that have once been flooded and reexposed when the waters receded, whether the sites in question be historic or prehistoric.

On August 10 the fifth Missouri Basin Project field party, consisting of Smith and his crew, moved into the Big Bend Reservoir area to conduct preliminary tests at site 39ST202, believed to be that of Fort George, a trading post of the 1840's. Only the scantiest contemporary record of this post has been found, although it was visited by Audubon and is reputed to have been of some importance as an opposition post in the fur trade. Tests there located former log habitations and occupational debris of the period. The site is located in Stanley County at the northeast corner of the Brule Indian Reservation. This field party also took charge of an emergency excavation of six human burials accidentally located by construction activities at the Big Bend Dam site and reported by the Corps of Engineers. The interments were in wooden coffins and contained glass beads and other late objects suggesting the early reservation period, though no record of such graves has been found. The Smith party completed 9 weeks in the field and returned to Lincoln August 19.

During the period October 26 to November 6, one Missouri Basin Project field party investigated a site being destroyed by gravel operations in the upper reaches of the Big Bend Reservoir area. Robert W. Neuman and a crew of two examined and tested the areas of the Arzberger site (39HU6), which were being cut away as a gravel quarry. A rich midden and several cache pits were exposed and excavated. Artifacts were collected and data compiled, but there appeared to be little material that had not already been discussed in a report on this site. During the same period Neuman also made a flight over the lower portion of the Oahe Reservoir and took aerial photos of several sites that had been flooded and reexposed by a drop

in the pool level. On the return trip to Lincoln this party also visited sites in the immediate construction area of the Big Bend Dam (at the request of the Corps of Engineers) and while there collected specimens for dendrochronological use. It also visited an earth-lodge village site near Wessington Springs, S. Dak., and examined several amateur collections in southwest Minnesota and northwest Iowa.

The 1961 summer field season in the Missouri River Basin began in the Merritt Reservoir area on May 25. Robert W. Neuman and an assistant spent 11 days in a final intensive search of the flood-pool area of this dam on the Snake River in Cherry County, Nebr. The dam is well along in construction and, despite two previous surveys that provided very little archeological evidence, it was thought that a final investigation should be made. The shifting sand dunes in this area, combined with the construction activities, might have revealed some cultural remains of the earlier periods. Such was found not to be the case and no archeological manifestations were noted. This reservoir area can be written off as completed.

The second Missouri Basin Project field party consisted of a crew of nine under the direction of Robert W. Neuman. This party began work on June 6 in the construction area of the Big Bend Reservoir (actually the upper reaches of the Fort Randall Reservoir) at site 39BF225. At that location there is a group of three low burial mounds situated on the terrace just west of the Talking Crow site (39BF3) in Buffalo County, S. Dak. By the end of the fiscal year Neuman had trenched two of these mounds and found three components present: (a) Historic with coffin burials, (b) the mound component with secondary pit burials, and (c) a premound, nonceramic component.

The third Missouri Basin Project field party of the season was composed of a crew of 10 directed by Dr. Warren W. Caldwell. It began work on June 13 at the Pretty Head site (39LM232). This site is located on the right bank of the Missouri River, 4 miles above the Big Bend Dam site in Lyman County, S. Dak. By the end of the year excavations were well under way in several middens, and in the remains of one long-rectangular house.

The fourth Missouri Basin Project field party of the 1961 season was a crew of 10 directed by Dr. Robert L. Stephenson. This party began work on June 19 in the upper reaches of the Oahe Reservoir in Corson County, S. Dak., on the west side of the Missouri River some 5 miles south of Mobridge. There a series of small sites extending from the Blue Blanket Island site (39WW9) downstream into Dewey County to site 39DW232 was to be investigated with intensive excavations at the Potts Village site (39CO19) and the Le Compte Creek site (39DW234). The latter are the remains of circular house villages with fortifications and suggest a possible link between the later

part of the long-rectangular-house period and the earlier part of the circular-house period. The two main sites each appear to have a single bastion in the fortification system. Excavations were well underway by the end of the year.

Cooperating institutions working in the Missouri Basin at the beginning of the fiscal year included five field parties from State agencies in North Dakota, South Dakota, Nebraska, Kansas, and Missouri. W. Raymond Wood of the University of Oregon had a crew at work for the State Historical Society of North Dakota at the Huff site (32M011) in the upper reaches of the Oahe Reservoir some 18 miles below Mandan, N. Dak. Wood's party excavated eight houses and 200 feet of palisade, and cross-sectioned the fortification ditch. This was the location of a fortified, bastioned village of long-rectangular houses with the houses loosely arranged in rows. One unusual house was nearly square and had four center posts comparable to the circular houses of other sites. Dr. Preston Holder of the University of Nebraska had a crew at work at the Leavenworth site (39C09), 7 miles north of Mobridge in Corson County, S. Dak., in the Oahe Reservoir. This site, visited by Lewis and Clark in 1804 and attacked by Col. Henry Leavenworth in 1823, was an Arikara village (or pair of villages) of circular houses. Holder's crew excavated four houses and tested several midden areas. Dr. Wesley R. Hurt, Jr., with a University of South Dakota crew, spent July and August excavating portions of the No Heart Creek site (39AR2) in old Armstrong County on the right bank of the Missouri River in the Oahe Reservoir. This small, compact, fortified, La Roche-type village had an unusual series of small bastions and entryways. Thomas A. Witty with a crew from the Kansas State Historical Society excavated four sites and tested several others in the Wilson Reservoir area on the Saline River in Russell and Lincoln Counties, Kans. All four excavated sites relate to the Central Plains Phase. Dr. Carl H. Chapman had a University of Missouri crew in the field surveying and testing sites in the Kasinger Bluff Reservoir on the Osage River in Henry, Benton, and St. Clair Counties, west-central Missouri.

At the end of the fiscal year six field parties representing four cooperating institutions were in the field in the Missouri Basin. Dr. Preston Holder was back at the Leavenworth site (39C09) in the Oahe Reservoir for a second season of work by the University of Nebraska. Dr. Carl H. Chapman was back at the Kasinger Bluff Reservoir in Missouri with a University of Missouri field party surveying and testing sites in that area. In addition, Chapman had a survey crew at work in the Stockton Reservoir area in Cedar and Dade Counties, Mo. Thomas A. Witty had a crew at work excavating the Woods site (14CY30) and testing several other sites in the Milford Reservoir on the Republican River in Geary County, Kans., for the Kansas

State Historical Society. Dr. Wesley R. Hurt had a crew at work by boat, testing several sites being exposed by wave action along the shores of Lewis and Clark Lake (Gavins Point) and Fort Randall Reservoirs, for the University of South Dakota. Roger T. Grange had a crew from the Nebraska State Historical Society at work in the Red Willow Reservoir area in Frontier County, southwestern Nebraska, excavating two sites near the dam construction area. All the parties mentioned above were operating under agreements with the National Park Service and were cooperating with the Smithsonian Institution in the research program.

During the time that the archeologists were not in the field they were engaged in the analysis of their materials and in the laboratory and library research. They also prepared manuscripts of technical scientific reports and wrote articles and papers of a more popular nature.

The Missouri Basin Chronology Program, begun by the staff archeologists of the Missouri Basin Project in January 1958, continued to operate and made considerable progress throughout the year. Continued cooperation and participation by more than 30 individuals representing 30 research institutions throughout the Plains area has been rewarding. This year major emphasis was placed upon the dendrochronological section of the program. Harry E. Weakly of the U.S. Department of Agriculture, Dr. Warren W. Caldwell of the Missouri Basin Project, and Ward Weakly of the University of Nebraska concentrated the tree-ring studies on a limited area along the Missouri River between Fort Thompson and the Cheyenne River in South Dakota. This takes in all the Big Bend Reservoir area and the lower portions of the Oahe Reservoir. A master chart has been constructed for this area using oak, ash, and cedar, that extends from the present back to A.D. 1302. Archeological wood, mainly cedar house posts, from a number of sites has been dated by the master chart. The dates look good, and in general correlate well with other chronological data, but until further checks have been made, release of these dates would be premature. In addition to the master chart, a "floating" sequence of nearly 300 years has been constructed, based upon timbers from houses of the Over Focus and the Thomas Riggs Focus. There also appears to be a high degree of correlation between the South Dakota master chart and the several charts that have been previously developed for areas of Nebraska.

The radioactive carbon-14 section of the program has continued to develop, and in conjunction with the University of Michigan Memorial Phoenix Laboratory, under the direction of Prof. H. R. Crane, a series of four new dates has been released. *Sample M-1079a*, charcoal from a house post of the late component at the Crow Creek site (39BF11) in the Fort Randall Reservoir, S. Dak., excavated by

Marvin F. Kivett for the Nebraska State Historical Society as a part of the Inter-Agency Archeological Salvage Program, gave a date of 560 ± 150 years ago. *Sample M-1080a*, charcoal from Feature 4 of the Good Soldier site (39LM238) in the Big Bend Reservoir of South Dakota, gave a date of $2,380 \pm 150$ years ago. This sample was excavated by Robert W. Neuman of the Missouri Basin Project staff. *Sample M-1081*, charcoal from zone D of the Logan Creek site (25BT3) in northeastern Nebraska, excavated by Marvin F. Kivett for the Nebraska State Historical Society, gave a date of $7,250 \pm 300$ years ago. *Sample M-1082*, wood from a house post in a small long-rectangular house (F. 2) of the Fay Tolton site (39ST11) in the Oahe Reservoir, gave a date of 860 ± 150 years ago. This sample was excavated by Dr. Donald D. Hartle, then of the Missouri Basin Project staff. An experiment in the decontamination of charcoal treated with paraffin failed completely. A log, one end of which had been coated with paraffin and the other end not so treated, had had the treated end deparaffined and both sections were run for carbon-14 analysis. The two dates from the same piece of charred wood were several centuries apart.

The laboratory and office staff spent its full effort during the year in processing specimen materials for study, photographing and illustrating specimens, preparing specimen records, and typing, filing, and illustrating record and manuscript materials. Accomplishments of the laboratory and office staff are listed in tables 1 and 2.

The Missouri Basin Project staff archeologists and archeologists of the National Park Service and cooperating States agencies working in the Missouri Basin met on July 30 in a roundtable field conference in Pierre, S. Dak. This 17½th Plains Conference, now a regular summer event, and a supplement to the annual Thanksgiving Plains Conference, was devoted to discussions of current fieldwork and technical problems of field identifications. During the Thanksgiving weekend, members of the staff participated in the 18th Plains Conference for Archeology, held in Norman, Okla. On April 14, members of the staff participated in the seventy-first annual meeting of the Nebraska Academy of Sciences in Lincoln.

Dr. Robert L. Stephenson, Chief, devoted a large part of his time during the year to managing the office and laboratory in Lincoln and preparing plans and budgets for the 1961 field season. He compiled a 7-volume summary of construction data and archeological work in all the 789 named reservoir sites in the Missouri Basin for use in future planning in the Lincoln office. He completed the revision of a large technical monograph, "The Accokeek Creek Site: A Middle Atlantic Seaboard Culture Sequence," previously accepted as his doctoral dissertation at the University of Michigan, and continued with preliminary analysis of materials he recovered from the excavations

at the Sully site (39SL4) in the Oahe Reservoir in 1956-57-58. He also continued work on a monograph reporting the "Archeological Investigations in the Whitney Reservoir, Texas," and two smaller manuscripts, all nearing completion at the end of the year. Throughout the year he served as chairman of the Missouri Basin Chronology Program; as assistant editor of "Notes and News in the Plains Area," for *American Antiquity*; and as associate editor for the *Plains Anthropologist*. At the 18th Plains Conference, held in Norman, Okla., on Thanksgiving weekend, he served as chairman of the session on "Field Reports" and as a panel discussant for the session on "The Aksarben Aspect."

Dr. Stephenson presented a paper, "The Housing Problem," at the seventy-first annual meeting of the Nebraska Academy of Sciences in Lincoln on April 14. During the year he wrote a number of book reviews for various scientific journals. He also wrote a brief article, "Comments on 'Relationships between the Caddoan Area and the Plains' by Robert E. Bell," for publication in the *Bulletin* of the Texas Archeological Society. On May 7 he was the guest speaker at the annual meeting of the Iowa Archeological Society, talking on the subject, "Drowning Our Heritage." Throughout the year he gave seven other talks on various aspects of Missouri Basin Salvage Archeology before regular meetings of local civic organizations and school groups. In July he drove to Moscow, Idaho, to deliver a load of archeological specimens from the Missouri Basin to Dr. Alfred Bowers of the University of Idaho and to consult with Dr. Bowers on the analysis of the material. While there he met with the executive dean of the University of Idaho to confer on problems involved in anthropological programs in the University. In May he was invited to Accokeek, Md., as a consultant to the Accokeek Foundation on an archeological research program for the Accokeek area. He took annual leave to serve as part-time assistant professor of anthropology on the faculty of the University of Nebraska during both the first and second semesters of the academic year. At the end of the year he was conducting investigations in prehistoric Indian village sites in the Oahe Reservoir area.

Dr. Warren W. Caldwell, archeologist, when not in charge of field parties, devoted most of his time to analyses of specimen materials he had recovered from salvage excavations in previous years. He completed final revisions of his manuscript "Archeological Investigations at the Hickey Brothers Site, 39LM4, Lyman County, South Dakota," in collaboration with Lee G. Madison and Bernard Golden; and of the manuscript "The Garrison Dam and Reservoir," in collaboration with G. Hubert Smith. He continued the detailed analysis of materials from the Black Partizan site (39LM218) in the Big Bend Reservoir, S. Dak., and in collaboration with Harry E. Weakly con-

tinued work on the dendrochronological materials from the Big Bend and Oahe Reservoirs of South Dakota. In May he consulted with Dr. Douglas Osborne of the National Park Service regarding complete revision and expansion of his monograph, "The Archeology of Wakemah; A Stratified Site near the Dalles of the Columbia," for publication in the National Park Service series. He also completed "Dendrochronology and the Missouri Basin Chronology Program," which was published in *The Tree Ring Bulletin*, vol. 23, No. 3. In addition, he wrote several book reviews. On July 30 he served as chairman of the 17½th Plains Conference in Pierre, S. Dak., and over Thanksgiving weekend he gave a report on his current fieldwork at the 18th Plains Conference in Norman, Okla. On April 14 he presented a paper at the seventy-first annual meeting of the Nebraska Academy of Sciences held in Lincoln, entitled "Some Thoughts on Guns and Indians." During the year he continued to serve as chairman of the dendrochronology section of the Missouri Basin Chronology Program; as assistant editor for reviews and literature for the *Plains Anthropologist*, and as Plains collaborator for the Society for American Archeology publication, *Abstracts of New World Archaeology*. On annual leave he continued to serve as part-time assistant professor of anthropology on the faculty of the University of Nebraska. At the end of the year he was again engaged in excavating archeological sites in the Big Bend Reservoir area.

Robert W. Neuman, archeologist, when not in the field conducting excavations, was analyzing archeological materials he had previously excavated in the Big Bend Reservoir area. He completed four manuscripts and had them accepted for publication: "The Olson Mound (39BF223) in Buffalo County, South Dakota"; "Salvage Archeology at a Site near Fort Thompson, South Dakota"; "A Bibliography of Archeological References Relating to the Central and Northern Great Plains Prior to 1930"; and "Domesticated Corn from a Fort Walton Mound in Houston County, Alabama." The first three will be published in the *Plains Anthropologist*; the fourth in the *Florida Anthropologist*. An article, "Indian Burial Mounds in the Upper Missouri River Basin," was published in *Progress of the Interior Missouri Basin Field Committee*. During the year he served as chairman of the carbon-14 section of the Missouri Basin Chronology Program. On Thanksgiving weekend he presented two papers at the 18th Plains Conference in Norman, Okla., entitled "Excavations at Four Mound Sites in the Oahe Reservoir" and "The Brother of All Document, 1888." During late April and early May he drove to Washington, D.C., and Knoxville, Tenn., to deliver a load of Missouri Basin archeological specimens and to confer with archeologists at both cities. At the end of the year he was again in the field conducting archeological excavations.

G. Hubert Smith, archeologist, after completing his fieldwork in August, was on duty the remainder of the year in the Lincoln office analyzing materials and preparing reports of work previously accomplished at historic sites in the Missouri Basin. His principal effort was directed toward preparation of a large monograph combining his own and several other investigators' work at the site of Fort Berthold and Like-a-Fishhook Village (32ML2) in the Garrison Reservoir, and by the end of the year he was well along on this manuscript. He also prepared an article, "Historical Archeology in the Missouri Basin Reservoir Areas," that was published in the *Plains Anthropologist* in November, and wrote (in collaboration with Warren W. Caldwell) a manuscript, "The Garrison Dam and Reservoir," for publication by the U.S. Army Corps of Engineers. Throughout the year he served as assistant editor for historic sites archeology for the *Plains Anthropologist* and as chairman of the historic documentation section of the Missouri Basin Chronology Program. He participated in the 18th Plains Conference, held in Norman, Okla., over Thanksgiving weekend with a report of his current field activities. On September 23-24 he participated as a discussant at the "Conference on Historic Buildings and Sites" at Iowa State University at Ames. On January 26-28, at the annual meeting of the Society of Architectural Historians, in Minneapolis, Minn., he presented an illustrated paper on "Frontier Buildings on the Upper Missouri," and on May 20 a similar paper, "Early Historic Buildings in the Missouri Basin," at the annual meeting of the Nebraska Association of Architects, held in Lincoln. On April 14 he spoke at the seventy-first annual meeting of the Nebraska Academy of Sciences in Lincoln on "Early Historic Sites and Buildings on the Upper Missouri: Some Problems of Evidence." At the close of the year he was at work in the Lincoln office on his monograph on site 32ML2.

TABLE 1.—*Specimens processed July 1, 1960—June 30, 1961*

Reservoir	Number of sites	Catalog numbers assigned	Number of specimens processed
Big Bend	6	496	2, 161
Fort Randall	1	83	1, 339
Walter F. George	57	2, 341	24, 101
Lewis and Clark	1	25	135
Oahe	15	2, 417	8, 145
Sites not in reservoirs	3	151	226
Site totals	83	5, 513	36, 107
Collections not assigned site numbers	1	3	46
Combined totals	84	5, 516	36, 153

As of June 30, 1961, the Missouri Basin Project had cataloged 1,255,716 specimens from 2,141 numbered sites and 59 collections not assigned site numbers.

Specimens restored: Two pottery vessels and one vessel section.

Specimens repaired: Fourteen nonpottery artifacts.

Specimens transferred to other agencies:

To the United States National Museum:

Archeological specimens from 425 sites in 10 reservoir areas.

Unworked shell from 16 sites in three reservoir areas.

To the University of Nebraska State Museum:

Identified, unworked animal bone from 120 sites in seven reservoir areas.

TABLE 2.—*Record material processed July 1, 1960—June 30, 1961*

MISSOURI BASIN PROJECT

Reflex copies of records	8,465
Photographic negatives made	1,507
Photographic prints made	8,916
Photographic prints mounted and filed	1,894
Transparencies mounted in glass	498
Kodachrome pictures taken in lab	160
Cartographic tracings and drawings	66
Artifacts sketched	45
Plates lettered	40
Profiles drawn	11
Plate layouts made for manuscripts	12

Cooperating institutions.—During the fiscal year a number of institutions cooperated in the Inter-Agency Salvage Program in several areas. In addition to those previously mentioned in the sections pertaining to Alabama-Georgia and the Missouri Basin, the following work was carried on under agreements with the National Park Service:

The University of Arkansas made studies in the Beaver Reservoir area on the White River and the Millwood Reservoir on Little River. The University of Kentucky conducted investigations in the Nolin Reservoir area on the Nolin River. The University of North Carolina worked at the Wilkesboro Reservoir on the Yadkin River. The University of Tennessee carried on activities in the Milton Hill Reservoir on the Clinch River. The Carnegie Museum of Pittsburgh studied archeological manifestations in the Shenango Reservoir area on the Shenango River. The New Jersey State Museum conducted investigations at Tocks Island. The University of Illinois had a project at the Shelbyville Reservoir on the Kaskaskia River, and Southern Illinois University made a series of excavations in the Carlyle Reservoir Basin on the same river. The Wisconsin State Historical Society conducted investigations in the Kickapoo Reservoir area on the Kickapoo River. The University of Texas carried on a series of surveys in the Texas Gulf Project. The Kansas State Historical

Society excavated in the Council Grove Reservoir on the Grand (Neosho) River. The University of Arizona continued its investigations in the Painted Rock area on the Gila River. The Museum of Northern Arizona continued its studies in the Glen Canyon Reservoir area on the Colorado River, as did the University of Utah in the same area and in the Flaming Gorge and Plainfield Reservoir Basins. The Museum of New Mexico worked in the Navajo Reservoir area along the San Juan River. The College of the Sequoias conducted investigations in the Terminus Reservoir area on the Kaweah River in California. Idaho State College worked in the Bruce's Eddy area on the North Fork of the Clearwater River. Washington State College continued its excavations in the Lower Monumental and Ice Harbor areas along the Columbia River and the University of Washington worked on the Priest Rapids-Wanapum Project in the Middle Columbia River district. The University of Oregon investigated sites in the John Day Reservoir Basin on the John Day River. Several institutions volunteered to carry on survey work without an agreement with the National Park Service. They include groups in Pennsylvania, New York State, Ohio, Indiana, southern California, and West Virginia. In the latter State the West Virginia Geological Survey did reconnaissance work in the Summerville Reservoir area on the Gauley River.

ARCHIVES

The Bureau archives continued under the custody of Mrs. Margaret C. Blaker, archivist. In May 1961 Mrs. Blaker visited the Haverford College Library, Haverford, Pa., where she examined pictorial and manuscript material in the Quaker Collection concerning American Indians, and in June, visited the library of Hampton Institute, Hampton, Va., and examined an extensive collection of field and studio photographs relating to Indians who were students at Hampton in the period 1880-1900. On July 10, 1960, Mrs. Caroline R. Cohen was appointed as junior anthropologist and was assigned to assist in the archives.

MANUSCRIPT COLLECTIONS

The papers of Dr. Frans M. Olbrechts, relating to his studies of the Cherokee Indians of North Carolina in 1926-31 when he was a collaborator of the Bureau, were transmitted to the Bureau archives by Dr. Olbrechts' widow, Mrs. Margriet Olbrechts of Wezembeek-Oppem, Belgium, through Dr. A. E. Meeussen, Koninklijk Museum, Tervuren, Belgium. Dr. Olbrechts died at Aix-la-Chapelle, March 24, 1958. The subject matter of the papers consists of the following categories: Vocabularies, grammar, texts, disease-name papers, Wilnoti formula papers, botany, myths, and miscellaneous ethnographic notes.

An 18-page inventory has been prepared, and the papers, which occupy 28 boxes, are available for study and microfilming.

The manuscript collection continued to be utilized by anthropologists and other students. About 300 manuscripts were consulted by searchers who visited the archives in person or purchased microfilm and other reproductions totaling 7,146 pages. An equal number of manuscripts was consulted by the archivist in obtaining information for over 90 mail inquiries. In the course of this examination, new and more detailed descriptions of manuscripts were also prepared for the permanent catalog and for future distribution in response to specific inquiries.

PHOTOGRAPHIC COLLECTIONS

The Bureau's collection of North American Indian photographs, which is one of the most extensive and most active of its kind, continued to grow through the generosity of interested individuals who either lent pictures for copying, or presented them as gifts.

Sixty original photographs of Mesquakie Indians, mainly taken by J. L. Hudson of Tama, Iowa, and apparently dating in part from the 1860's, were lent for copying by Norman Feder of New York City. Mr. Feder also lent a series of about 40 copy prints of Prairie Potawatomie of the latter part of the 19th century.

Over 150 photographic slides of American Indian subjects were received on loan from Mrs. Doris Collester of East Riverdale, Md. Of especial interest are several dozen slides of Apache, Pima, and Maricopa Indians dated 1871 or in years of the following decade. Many of the slides bear the name of Moore, Bond & Co., Chicago or Moore, Hubbell, & Co., Chicago, as distributor, although the original source of most of the photographs is still unknown.

Forty-six photographs relating to Cree and Chipewyan Indians in Alberta, Saskatchewan, and Mackenzie, Canada, taken by Dr. Francis Harper on an expedition of the Geological Survey of Canada to the Great Slave Lake in 1914 were obtained from the Geological Survey of Canada, through the courtesy of Dr. Francis Harper and Dr. J. M. Harrison, Director of the Survey.

A scrapbook of James Earl Taylor, artist-correspondent for *Frank Leslie's Illustrated Weekly Newspaper* from 1863 to 1883, was received as a gift from the Pennsylvania Historical and Museum Commission, through John Witthoft. The scrapbook contains several hundred original photographic prints of western Indians, several photographs of Army officers, linecuts of western military posts, and other material assembled for the artist's reference, as well as reproductions of a number of Taylor's own illustrations.

Seventeen photographs of important men of the Osage, Caddo, Arapaho, Cherokee, Creek, Chickasaw, and Seminole tribes were

borrowed for copying from the Quaker Collection, Haverford College Library, Haverford, Pa., through the courtesy of Dr. Thomas E. Drake. The portraits are all on similar mounts of the carte de visite style, and most are inscribed with the subjects' names and the dateline September 1865, Fort Smith, Ark. Only one of the photographs has a photographer's imprint. It is a portrait of Left Hand and Powder Face, Arapahoes, with Superintendent Enoch Hoag. On the reverse is stamped, "W. H. Lamon, Photograph Artist, Corner Massachusetts & Henry Sts., Lawrence, Kansas." Four views of Kickapoo bark- and mat-covered lodges in Chief Wapamashawa's village, Indian Territory, were also borrowed from the Quaker collection and copied.

Thirteen photographs, including 10 relating to Kiowa, Wichita, and Apache Indians, by Irwin of Chickasha, Indian Territory, 1892-ca. 1894, were lent for copying by Vernon M. Riley of Chino, Calif.

Five photographs relating to Omaha and Ponca Indians of the latter 19th century, and a group photograph of the officers of the American Association for the Advancement of Science at Ann Arbor, 1885, including the Reverend J. Owen Dorsey and Mrs. Erminnie A. Smith (both formerly associated with this Bureau) were lent for copying by Mrs. Virginia Dorsey Lightfoot of Takoma Park, Md.

Five photographs of Osage Indians, taken in 1871 by T. M. Con-
cannon at the Osage Agency, Indian Territory, were received as a gift from Mrs. Ernest J. Martin of Drain, Oreg.

Nine photographs relating to Indians of the Southwest who were connected with projects of the U.S. Bureau of Reclamation in that area in 1941-60 were donated by the Bureau of Reclamation.

Ten copy photographs of Ute Indians of the 1870's and 1880's were received in exchange from Dr. Omer C. Stewart of Boulder, Colo.

Six recent photographs of Quapaw Indians of Oklahoma were presented by Mrs. Velma Nieberding of Miami, Okla.

A collection of between 100 and 200 mounted photographs and glass slides was received as a transfer from the library of the United States Department of the Interior. At year's end these photographs had not yet been arranged and individually listed. They relate to a variety of North American Indian tribes.

During the year prints were prepared from several hundred snapshot negatives by Matilda Coxe Stevenson that had not been previously cataloged. Most of the photographs were made at Zuñi Pueblo, ca. 1904. They include numerous views relating to dances and ceremonials and a lesser number pertaining to domestic activities. In spite of the fact that some of the photographs are not of high quality photographically, many are surprisingly clear and informative, and the collection as a whole warrants careful study.

In addition to the Zuñi views, in the Stevenson collections there are a relatively small number of photographs relating to the pueblos

of Cochiti, ca. 1904, San Ildefonso, ca. 1908, and Santa Clara, ca. 1911. A 16-page caption list of the entire collection has been prepared.

The photographic files continued to be used extensively by scholars and the general public. The year's total of approximately 600 purchase orders and written and personal inquiries concerning photographs is about equal to that of last year, while the total of over 2,000 prints distributed exceeds last year's figure.

ILLUSTRATIONS

Work during the past fiscal year consisted of the preparation of numerous charts, graphs, diagrams, and maps, the restoration of photographs, photo retouching, and the drawing of a variety of Indian artifacts. Also many miscellaneous drawings, diagrams, etc., were prepared for other branches of the Institution.

LIBRARY

Detailed information about the Bureau library is contained in the report of the librarian on the Smithsonian Library, but it is well to emphasize the fact that the Bureau library is still serving a useful purpose in providing reference material not only for members of the staff but for students and professionals in the Washington area and visitors from other parts of the country. However, it should be pointed out that the library is not wholly fulfilling the function that it should because of the lack of a librarian. A full-time librarian would not only greatly expedite the use of the facility by members of the staff, but would also be extremely helpful to those who find it necessary to consult publications in the Bureau library, many of which are not available in many other places. Furthermore, through an intimate knowledge of the material now available, a librarian would be able to see that new publications pertaining to the Bureau's researches are acquired promptly when they become available. For many years the Bureau library was one of the outstanding places in North America for anthropological research, and it well merits a return to its former status.

EDITORIAL WORK AND PUBLICATIONS

The Bureau's editorial work continued during the year under the immediate direction of Mrs. Eloise B. Edelen. There were issued one Annual Report and two Bulletins, as follows:

Seventy-seventh Annual Report of the Bureau of American Ethnology, 1959-60.
ii+35 pp., 2 pls. 1961.

Bulletin 176. River Basin Surveys Papers, Nos. 15-20, Frank H. H. Roberts, Jr., editor. ix+337 pp., 65 pls., 25 figs. 1960.

No. 15. Historic sites archeology on the Upper Missouri, by Merrill J. Mattes.

Bulletin 176—Continued

No. 16. Historic sites archeology in the Fort Randall Reservoir, South Dakota, by John E. Mills.

No. 17. The excavation and investigation of Fort Lookout Trading Post II (39LM57) in the Fort Randall Reservoir, South Dakota, by Carl F. Miller.

No. 18. Fort Pierre II (39ST217), a historic trading post in the Oahe Dam area, South Dakota, by G. Hubert Smith.

No. 19. Archeological investigations at the site of Fort Stevenson (32ML1), Garrison Reservoir, North Dakota, by G. Hubert Smith. With an introduction by Robert L. Stephenson and an appendix by Carlyle S. Smith.

No. 20. The archeology of a small trading post (32MN1) in the Garrison Reservoir (Kipp's Post) South Dakota, by Alan R. Woolworth and W. Raymond Wood.

Bulletin 180. Symposium on Cherokee and Iroquois culture, edited by William N. Fenton and John Gulick. VI+292 pp. 1961.

No. 1. Foreword by the editors.

No. 2. Iroquois-Cherokee linguistic relations, by Floyd G. Lounsbury.

No. 3. Comment on Floyd G. Lounsbury's "Iroquois-Cherokee Linguistic Relations," by Mary R. Haas.

No. 4. Iroquois archeology and settlement patterns, by William A. Ritchie.

No. 5. First comment on William A. Ritchie's "Iroquois Archeology and Settlement Patterns," by William H. Sears.

No. 6. Second comment on William A. Ritchie's "Iroquois Archeology and Settlement Patterns," by Douglas S. Byers.

No. 7. Cherokee archeology, by Joffre L. Coe.

No. 8. Comment on Joffre L. Coe's "Cherokee Archeology," by Charles H. Fairbanks.

No. 9. Eastern Woodlands community typology and acculturation, by John Witthoft.

No. 10. Comment on John Witthoft's "Eastern Woodlands Community Typology and Acculturation," by John M. Goggin.

No. 11. Cherokee economic cooperatives: the Gadugi, by Raymond D. Fogelson and Paul Kutsche.

No. 12. The rise of the Cherokee state as an instance in a class: The "Mesopotamian" career to statehood, by Fred O. Gearing.

No. 13. Comment on Fred O. Gearing's "The Rise of the Cherokee State as an Instance in a Class: The 'Mesopotamian' Career to Statehood," by Annemarie Shimony.

No. 14. Cultural composition of the Handsome Lake religion, by Anthony F. C. Wallace.

No. 15. Comment on Anthony F. C. Wallace's "Cultural Composition of the Handsome Lake Religion," by Wallace L. Chafe.

No. 16. The Redbird Smith movement, by Robert K. Thomas.

No. 17. Comment on Robert K. Thomas's "The Redbird Smith Movement," by Fred W. Voget.

No. 18. Effects of environment on Cherokee-Iroquois ceremonialism, music, and dance, by Gertrude P. Kurath.

No. 19. Comment on Gertrude P. Kurath's "Effects of Environment on Cherokee-Iroquois Ceremonialism, Music, and Dance," by William C. Sturtevant.

No. 20. The Iroquois fortunetellers and their conservative influence, by Annemarie Shimony.

No. 21. Change, persistence, and accommodation in Cherokee medico-magical beliefs, by Raymond D. Fogelson.

Bulletin 180—Continued

- No. 22. Some observations on the persistence of aboriginal Cherokee personality traits, by Charles H. Holzinger.
- No. 23. First comment on Charles H. Holzinger's "Some Observations on the Persistence of Aboriginal Cherokee Personality Traits," by David Landy.
- No. 24. Second comment on Charles H. Holzinger's "Some Observations on the Persistence of Aboriginal Cherokee Personality Traits," by John Gulick.
- No. 25. Iroquoian culture history: A general evaluation, by William N. Fenton.

Publications distributed totaled 29,845, as compared with 31,547 for the fiscal year 1960.

COLLECTIONS

The following collections were made by staff members of the Bureau of American Ethnology or of the River Basin Surveys and transferred to the permanent collections of the department of science and technology, the department of civil history, and the department of anthropology, U.S. National Museum:

FROM BUREAU OF AMERICAN ETHNOLOGY

Acc. No.

- 236067. Dictaphone. Through Dr. Frank H. H. Roberts, Jr.
- 234469. 31 Belgian postage stamps. Through Mrs. Margaret C. Blaker.

FROM RIVER BASIN SURVEYS

- 225806. 160 land and fresh-water mollusks from Arkansas and South Dakota. Through Dr. Robert L. Stephenson.
- 232081. Indian skeletal remains from Big Bend Reservoir, Buffalo County, S. Dak.
- 232741. 5,153 archeological items and skeletal material from Fall River County, S. Dak., and Crook and Fremont Counties, Wyo., 1957.
- 233812. Indian skeletal materials from the McNary Reservoir region.

MISCELLANEOUS

Dr. M. W. Stirling, Dr. John P. Harrington, Dr. A. J. Waring, and Sister Inez Hilger continued as research associates. Dr. Stirling, assisted by Mrs. Marion Stirling, using the Bureau's laboratory facilities, completed work on the materials from the Ecuadorian field trip undertaken while he was Director of the Bureau, and turned in a manuscript which will be published in the Bureau's series of anthropological papers.

The following bibliographies and leaflets were issued during the fiscal year:

- SIL-50, 3d rev., 2/61: Selected list of portraits of prominent Indians in the collections of the Bureau of American Ethnology.
- SIL-53, rev., 2/61: Photographic collections of the Bureau of American Ethnology.
- SIL-76, rev., 7/60: Statement regarding the Book of Mormon.
- SIL-92, rev., 1/61: Origin of the American Indian.

SIL-134, rev., 10/60: American Indian languages.

SIL-175, rev., 3/61: Selected references on present-day conditions among U.S. Indians.

SIL-264, 11/60: Selected references on the Indian and the Frontier.

SIL-276, 1/61: Linguistic considerations in the interpretation of place names.

Other bibliographies were revised during the year. They are: the "Battle of the Little Bighorn" (should be available for distribution by September 1961), and the popular "Bibliography of American Indian Medicine" (available before December 1961.)

The nearly 3,900 letters received in the Director's office plus a few hundred received by staff members are a good indication of the continued interest in the American Indian. In addition, several thousand letters requesting Bureau publications are received yearly in the Editorial and Publications Division. Many complete sets of the Bureau's bibliographies were sent out upon requests from college and university professors and libraries, and to other educational organizations. Approximately 10,200 informational items, including typescript and printed articles, bibliographies, and other leaflets, plus more than 300 photographic lists were mailed from the main Bureau office in response to requests for such materials. Many specimens were mailed in or brought to the office for identification and data on them were supplied.

Respectfully submitted.

FRANK H. H. ROBERTS, JR., *Director.*

Dr. LEONARD CARMICHAEL,

Secretary, Smithsonian Institution.



Seventy-ninth Annual Report
of the
BUREAU OF AMERICAN
ETHNOLOGY

1961-1962



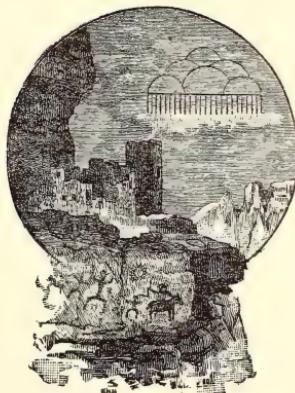
SMITHSONIAN INSTITUTION
WASHINGTON
D.C.

SEVENTY-NINTH
ANNUAL REPORT OF THE

BUREAU OF
AMERICAN ETHNOLOGY

TO THE SECRETARY OF THE
SMITHSONIAN INSTITUTION

1961-1962



UNITED STATES
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BUREAU OF AMERICAN ETHNOLOGY

June 30, 1962

Director.—FRANK H. H. ROBERTS, Jr.

Anthropologists.—HENRY B. COLLINS, WILLIAM C. STURTEVANT,
WALLACE L. CHAFE, ROBERT M. LAUGHLIN.

Research Associates.—SISTER M. INEZ HILGER, MATTHEW W.
STIRLING, A. J. WARING, Jr.

Archivist.—MRS. MARGARET C. BLAKER.

Scientific illustrator.—E. G. SCHUMACHER.

Administrative assistant.—MRS. JESSIE S. SHAW.

RIVER BASIN SURVEYS

Director.—FRANK H. H. ROBERTS, Jr.

Chief, Missouri Basin Project.—ROBERT L. STEPHENSON.

Archeologists.—LIONEL A. BROWN, WARREN W. CALDWELL,
HAROLD A. HUSCHER, WILFRED M. HUSTED, OSCAR L. MALLORY,
CARL F. MILLER, ROBERT W. NEUMAN, G. HUBERT SMITH.

SEVENTY-NINTH ANNUAL REPORT
OF THE
BUREAU OF AMERICAN ETHNOLOGY

FRANK H. H. ROBERTS, JR., *Director*

SIR: I have the honor to submit the following report on the field researches, office work, and other operations of the Bureau of American Ethnology during the fiscal year ended June 30, 1962, conducted in accordance with the act of Congress of April 10, 1928, as amended August 22, 1949, which directs the Bureau "to continue independently or in cooperation anthropological researches among the American Indians and the natives of lands under the jurisdiction or protection of the United States and the excavation and preservation of archeologic remains."

SYSTEMATIC RESEARCHES

Dr. Frank H. H. Roberts, Jr., director, devoted a portion of his time to office duties and the general supervision of the Bureau and the River Basin Surveys. In mid-July in company with Dr. Robert L. Stephenson, chief of the Missouri Basin Project of the River Basin Surveys, and Dr. John M. Corbett, archeologist for the National Park Service, he made an inspection trip to the River Basin Surveys excavating parties in the Missouri Basin and visited several local institutions which were conducting excavations in cooperation with the Inter-Agency Archeological Salvage Program. He then proceeded to the Agate Basin Site in eastern Wyoming where a joint Smithsonian Institution-National Geographic Society party under his general direction was digging in a site attributable to one of the early hunting groups in the Plains area. Dr. Roberts remained at the site until the work was terminated early in August. The immediate field work was under the direction of Dr. William M. Bass. During the course of the investigations numerous cut and split animal bones with evidence both for a kill and for a camping area were found. Associated with them were a variety of stone and bone implements. Most of the animal bones have been identified as representing bison of an extinct species, *Bison antiquus*. A few of the bones undoubtedly represent one of the Cervidae, but they are not diagnostic of species. Also, there were a few jack-rabbit bones. The artifacts in addition to projectile points include various forms of scrapers, flake knives, spoke shaves, flakes with graver's points, and a few bone tools. This assemblage of implements represents a definite contribution because it makes

possible the establishment of an Agate Basin Complex. At two places in the excavated area, objects found at a lower level indicated that Folsom Man had at least visited the area prior to the occupation by the makers of the Agate Basin type complex. One carbon-14 date obtained for the Agate Basin level indicates that the occupation was at about $9,350 \pm 400$ years before the present, and charcoal from the Folsom level has given a date of $10,375 \pm 700$ years before the present. This suggests that the basin was occupied at least at intervals over a period of about 1,000 years.

After returning to Washington from Wyoming, Dr. Roberts went to São Paulo, Brazil, where he represented the Smithsonian Institution and the United States at a conference on the origin and antiquity of man in the New World. He made three speeches at the conference and was elected one of the two vice presidents for the session. In September he went to Mesa Verde National Park in southwestern Colorado where he served as a member of the advisory group for the Wetherill Mesa Project. In November he participated in the 19th Plains Conference for Archeology at Lawton, Okla., and read a paper on the 1961 excavations at the Agate Basin Site. Later he went to Macon, Ga., as a member of an advisory group for a series of studies to be carried on at Ocmulgee National Monument. Early in June he visited the offices of the Missouri Basin Project of the River Basin Survey at Lincoln, Nebr., and assisted in sending out a number of field parties for work in Kansas, South Dakota, Wyoming, and Montana.

Dr. Henry B. Collins, anthropologist, continued his Eskimo studies and other Arctic activities. The Russian translation program—*Anthropology of the North: Translations from Russian Sources*—which he organized in 1960 continued its operation with the support of a second year's grant from the National Science Foundation. The second volume of translations, *Studies in Siberian Ethnogenesis*, edited by Henry N. Michael, was published by the University of Toronto Press for the Arctic Institute of North America in April 1962. This 313-page volume contains 17 articles by Soviet ethnologists, anthropologists, historians, and linguists on the origin and relationships of the Yakut, Tungus, Buryat, Kirgiz, the Amur tribes, and Samoyed and other ethnic groups of Siberia. Work is proceeding on the translation and editing of additional volumes and papers on Siberian archeology, ethnology, and physical anthropology selected by the Arctic Institute's advisory committee, of which Dr. Collins is chairman.

Dr. Collins' article on Eskimo art appeared in volume 5 of the *Encyclopaedia of World Art*. It traces the development of Eskimo art from prehistoric to modern times and describes and illustrates the

various regional art styles, ancient and modern, in Alaska, Canada, and Greenland. He also prepared an article on the relationships of the earliest Eskimo cultures to recently discovered pre-Eskimo cultures in the western Arctic for a volume on early man in the western Arctic to be published by the University of Alaska.

Dr. Collins continued to serve as a member of the Board of Governors of the Arctic Institute of North America and as a member of its publications committee responsible for the quarterly journal *Arctic* and the two other Arctic Institute series, *Technical Papers* and *Special Publications*. He also continued to serve as chairman of the directing committee which plans and supervises preparation of the *Arctic Bibliography*, a comprehensive reference work which abstracts and indexes the contents of publications in all fields of science, and in all languages, relating to the Arctic and sub-Arctic regions of the world. This Arctic Institute project, for which Dr. Collins has been primarily responsible since its inception in 1947, is being supported by grants and allotments from the Department of Defense, National Institutes of Health, Atomic Energy Commission, and Defense Research Board of Canada. The Library of Congress provides office space, and most of the work of compilation and editing is done there under the direction of Miss Marie Tremaine. In addition to the unsurpassed collections of the Library of Congress, those of the Smithsonian Library and 80 other large libraries in the United States and Canada, as well as of polar research institutes in England, France, and Norway, are being utilized in the preparation of the bibliography. Volume 10 was issued by the Government Printing Office in December 1961, and volume 11 is ready for the printer. Volume 10 (1,520 pages) abstracts and indexes the contents of 6,570 scientific publications on Arctic and sub-Arctic areas and on low temperature conditions; added to the abstracts appearing in the previous nine volumes, this makes a total of 62,848 such publications abstracted to date. In volume 10, for the first time, Russian language material exceeds that in English, reflecting expanded research activities of Soviet scientists in their Arctic territories; the volume contains abstracts, all in English, of 3,075 Russian publications, of 2,503 publications in English, 513 Scandinavian, 212 German, and 267 in other languages. Subjects that have received special emphasis in this volume are geology, geophysics, mineral resources, meteorology, fisheries, oceanography, transportation, construction, economic and social conditions, anthropology and acculturation of Eskimos and native Siberian peoples, acclimatization, military and public health, diseases, and the environmental effects of darkness, humidity, light, and low temperature on animals, man, and plants.

Dr. William C. Sturtevant, ethnologist, continued his research re-

lated to the ethnology of the Eastern North American Indians. Particularly he broadened his Iroquois research, previously concentrated on the Seneca of New York, to include the very poorly known Seneca-Cayuga of northeastern Oklahoma. During August 1961 he spent 3 weeks doing field work among this group (including attendance at their major annual ceremony, the Green Corn Dance). In January and May he spent several days studying Oklahoma Seneca-Cayuga specimens in the Museum of the American Indian in New York, and in June visited the National Museum of Canada in Ottawa to study the large collection made among this group by Marius Barbeau in 1911 and 1912. These Iroquois are descended from a group which settled in Ohio in the 18th century, together with accretions received since then from New York and Canada. At present those who speak an Indian language speak Cayuga. Although there have been continuous intermittent contacts with other Iroquois, the culture of this group is the most deviant found in any Iroquois community, and its study promises to elucidate several aspects of general Iroquois culture—particularly some features of the various major ritual complexes. Conversations with informants during a brief return visit to the New York Seneca in October helped clarify some of these matters.

While in Oklahoma Dr. Sturtevant spent a day among the Delaware inquiring about the last years of their ceremonial structure, the Big House. Carved posts from this building were studied in museums in Oklahoma, New York, and Toronto during this and previous years, and some notes on the subject by F. G. Speck were located in the American Philosophical Society Library in Philadelphia. Dr. Sturtevant returned from Oklahoma via Mississippi and North Carolina, stopping about 3 days in each State to renew and expand his acquaintance with the Choctaw and Cherokee.

During September Dr. Sturtevant prepared a paper on "Spanish-Indian Relations in Southeastern North America," which he delivered at the annual meeting of the American Indian Ethnohistoric Conference in Providence in October. This later appeared in *Ethnohistory* (vol. 9, pp. 41-94, 1962). His paper on "Taino Agriculture" was published in *Antropológica Supplement Publication No. 2* (Caracas, 1961). In October Dr. Sturtevant attended an International Conference on Iroquois Research, at McMaster University, Hamilton, Ontario, where he presented an oral report on his Oklahoma field work. In November he attended the annual meetings of the American Anthropological Association in Philadelphia.

Dr. Wallace L. Chafe, linguist, spent July and August in Anadarko, Okla., collecting material for a description of the Caddo language. He recorded a considerable quantity of linguistic data on this language for which almost no information was previously available, and he

returned to Oklahoma in mid-June 1962 to continue this work. In August he spent a few days with Dr. Sturtevant at the Seneca-Cayuga Green Corn Dance and was able to locate a few speakers of Wyandot, a language that had been thought to be extinct.

Between September and May Dr. Chafe worked at the Bureau on a half-time basis, teaching courses on several linguistic subjects at Catholic and Georgetown Universities. At Georgetown he worked with a speaker of Winnebago and hopes eventually to prepare some descriptive material on that language. Through this study he was led to pursue further some facts suggestive of a remote relationship between the Siouan, Caddoan, and Iroquoian language families. During the fall he continued his survey of the present number of speakers of North American Indian languages, the results of which are being published in the *International Journal of American Linguistics*. He read papers at the International Conference on Iroquoian Studies at Hamilton, Ontario, in October, and at the Annual Meeting of the American Anthropological Association in Philadelphia in November. He was program chairman for the spring meeting of the American Ethnological Society in Washington in April and edited the papers read at the meeting for publication. During the late spring he spent several weeks continuing work on a Seneca dictionary.

Robert M. Laughlin, ethnologist specializing in the Middle American area, joined the staff of the Bureau on June 11, 1962. He spent the remaining days of the fiscal year in research on the Huastec of Veracruz and San Luis Potosí, Mexico, in preparation for an article for the Handbook of Middle American Indians, to be published by the Middle American Research Institute of Tulane University.

RIVER BASIN SURVEYS

During fiscal 1962 the River Basin Surveys unit continued its program for salvage archeology in areas to be flooded or otherwise destroyed by the construction of large dams. The work as in previous years was carried on in cooperation with the National Park Service and the Bureau of Reclamation of the Department of the Interior, the Corps of Engineers of the Department of the Army, and a number of State and local institutions. An increase in funds that became available late in the year made possible an expansion in the program. During 1961-62 the investigations were supported by a transfer of \$231,705 from the National Park Service and a grant of \$2,000 from the Appalachian Power Co. The funds from the National Park Service were for use in the Missouri Basin and along the Chattahoochee River, Alabama-Georgia. The grant from the Appalachian Power Co. was to provide for an archeological survey in the area along

the Roanoke River in southern Virginia where its Smith Mountain Project is underway. The funds from the National Park Service provided \$204,500 for the Missouri Basin and \$27,205 for the Chattahoochee Project. A carryover of \$7,734 in the Missouri Basin made the total for that area \$212,234. The grand total of funds available in 1961-62 for the River Basin Surveys was \$241,439.

Investigations in the field consisted of surveys and excavations. Most of the efforts were concentrated in the digging of sites, but surveys were made in three new reservoir basins and two watershed project areas. Also, at the end of the year a survey was underway in the Missouri River area in Montana, locally known as the Missouri Breaks, which is to be set aside as the Lewis and Clark National Wilderness Waterway. Two of the new reservoirs were in Virginia and one in Nebraska. One of the watershed projects was also in Nebraska and the other was in Iowa. At the beginning of the fiscal year three parties were in the field in the Missouri Basin. A fourth began operations in that area in August, and another party resumed investigations along the Chattahoochee River during the same period. At the end of April a party returned to the Chattahoochee area and started further excavations in the Walter F. George Reservoir Basin. In May two small parties were at work in Nebraska, one in South Dakota, and one in Iowa. In June 11 parties moved into the Missouri Basin; one of them was working in Kansas, seven were in South Dakota, one was in Wyoming, one was in Wyoming-Montana, and one in Montana. With the exception of the one in Alabama-Georgia, which terminated its activities on June 30, all these parties were continuing their investigations at the close of the fiscal year.

As of June 30, 1962, reservoir areas where archeological surveys and excavations had been made since the start of the salvage program totaled 258, located in 29 States. In addition, two lock projects, four canal areas, and two watershed areas had been examined. During the years since the program got underway, 4,979 sites have been located and recorded, and of that number 1,171 were recommended for excavation or limited testing. Because complete excavation is rarely possible, except in the case of a few small sites, the term "excavation" implies digging approximately 10 percent of a site. With the exception of those where the work was done during the past year, preliminary appraisal reports have been issued for most of the areas surveyed and, in cases where additional reconnaissance has resulted in the discovery of other sites, supplemental reports have been prepared. Where no archeological manifestations were noted or where they were too meager to be of import, no general report was issued. Manuscripts have been completed for two of the surveys made last year, and they probably will be issued sometime during the coming fiscal year.

By the end of the year, 547 sites in 54 reservoir basins and 1 watershed area had either been tested or dug sufficiently to provide good information about them. Thus far at least one example of each site recorded in the preliminary surveys has been examined. They cover the range from camping locations occupied by the early hunting and gathering peoples of about 10,000 years ago to village remains left by early historic Indians, as well as the remains of frontier Army and trading posts of European origin. Reports on the results of the investigations have appeared in various scientific journals, in the Bulletins of the Bureau of American Ethnology, and in the Miscellaneous Collections of the Smithsonian Institution. Bulletin 179, containing River Basin Surveys Papers 21-24, was distributed in December 1961. These papers consist of a series of reports on excavations conducted in Texas, Iowa, and the Columbia basin, Oregon-Washington. Bulletin 182, containing River Basin Surveys Paper 25, a report on the excavations carried on in the John H. Kerr Reservoir basin, Virginia-North Carolina, was in press at the end of the year and should be ready for distribution early in the coming year. River Basin Surveys Papers 26-32, comprising Bulletin 185, should be ready for distribution early in the coming year. The papers contain data on the results of investigations in the Tiber Reservoir basin, Montana, the Garrison and Jamestown Reservoir areas in North Dakota, and the Lovewell Reservoir area in Kansas. River Basin Surveys Papers 33-38, which will constitute Bulletin 189, have been turned over to the editors and will be sent to the printer early in the next fiscal year. The contents pertain to excavations in North Dakota, South Dakota, and Kansas.

Throughout the year the River Basin Surveys continued to receive helpful cooperation from the National Park Service, the Bureau of Reclamation, the Corps of Engineers, the Geological Survey, and various State and local institutions. The field personnel of all the cooperating agencies assisted the party leaders in many ways and the relationship was excellent in all areas. Transportation and guides were furnished in a number of instances, and mechanical equipment made available by the construction agency speeded the work at a number of locations. Detailed maps of the reservoirs under investigation were supplied by the agency concerned and helpful information was provided whenever it was needed. The National Park Service continued to serve as liaison between the various agencies, both in Washington and in the field. It also was responsible for the preparation of estimates and justifications for the funds needed to carry out the salvage program. Valuable assistance in numerous ways was provided by the commanding officer at Fort Benning in Georgia while studies were being made in that portion of the Walter F. George

Reservoir basin which is within the boundaries of the Fort Benning Reservation. Various local clubs and groups of citizens, both in Alabama and Georgia, the Georgia Historical Commission, and the University of Georgia assisted the leader of the River Basin Surveys party while he was working along the Chattahoochee River. In the Missouri Basin Project engineers and personnel from the Corps of Engineers were very helpful in carrying out activities in that area. Furthermore, the Corps of Engineers and the Missouri Basin Project of the River Basin Surveys cooperated in the preparation of small informative pamphlets telling about various reservoirs along the Missouri River. The pamphlets were published by the Corps of Engineers and are being distributed to visitors at various reservoir installations.

General direction and supervision of the program were continued by the main office in Washington. The field headquarters and laboratory at Lincoln, Nebr., was in direct charge of the work in the Missouri Basin. The activities along the Chattahoochee River and in southern Virginia were supervised by the Washington office.

Washington office.—The main headquarters of the River Basin Surveys in the Bureau of American Ethnology continued under the direction of Dr. Frank H. H. Roberts, Jr., throughout the year. Carl F. Miller and Harold A. Huscher, archeologists, were based at that office. Mr. Miller spent a major portion of the year in the Washington office working on materials and data he had collected during previous seasons in the field. He also corrected the final page proofs for his report on the investigations made at the James H. Kerr Reservoir on the Roanoke River in southern Virginia. He made a number of talks before schools and civic organizations in the metropolitan area of Washington and spoke before the Archeological Society of Delaware at Wilmington. In October he attended the sessions of the Eastern States Archeological Federation at Williamsburg, Va. He identified numerous artifacts from the southeastern archeological area for collectors who either sent them to the office or brought them in person and furnished information for replies to letters inquiring about archeological problems. On April 3 at Rocky Mount, Va., he began an archeological reconnaissance of the Smith Mountain Project of the Appalachian Power Co. He completed that assignment and returned to Washington on May 11. He then prepared a report on the results of his survey, recommending a series of excavations for the two reservoir areas included in the project. On June 11 he left Washington for Lincoln, Nebr., to take charge of one of the Missouri Basin field parties. His activities during the remainder of the fiscal year are covered in the Missouri Basin portion of this report.

At the beginning of the fiscal year Mr. Huscher was in the Wash-

ton office working on records and collections from the previous field season. Early in August he established headquarters at Eufaula, Ala., for a series of archeological studies in the Walter F. George Reservoir basin on the Chattahoochee River. Because of unfavorable weather conditions, he ended his field activities there at the end of December. In November he participated in the sessions of the Conference for Plains Archeology, at Lawton, Okla., and on December 1 and 2 in the Southeastern Archeological Conference held at Ocmulgee National Monument at Macon, Ga. After his return to Washington, Mr. Huscher devoted his time to the study of data and materials which he had collected during the previous months along the Chattahoochee River. At the end of May he again returned to the Walter F. George Reservoir area, Alabama-Georgia, and resumed his investigations of archeological sites to be flooded by the rising waters of the reservoir. He completed his field activities at the end of June.

Alabama-Georgia.—During the period from August 4 to December 30, a series of investigations was made in the Walter F. George Reservoir basin on the Chattahoochee River by a party under the direction of Harold A. Huscher. They spent the first 2 weeks of the field season checking a series of public-use areas laid out at regular intervals on both sides of the Chattahoochee River from Columbia, Ala., north to the Fort Benning area. Between the Fort Benning Reservation and Columbus, Ga., a series of harbor developments is contemplated, and a further check of sites was made at that location. The party found that the recreation-area program would involve four important sites on the Alabama side of the river and one on the Georgia side. Original plans had called for virtual destruction of the great Rood's Landing mound site on the Georgia side, but as a result of conferences with the representatives of the Corps of Engineers the roads contemplated were shifted so that they would completely miss the mounds and adjacent archeological manifestations. The new plans also provided for the development of the central plaza of the site as a grassed lawn area. This particular site is significant because it was an important ceremonial center which contained eight mounds.

Following the study of the public-use area the crew was enlarged and the remainder of the field season was devoted to an examination of 24 additional sites. Collections were made from 21 of them, 9 of which had not previously been listed. Actual excavations were made at eight sites, of which the two mounds south of Georgetown, Ga., were worked most extensively. In every place where digging was done, four or more squares were excavated. Each square is 10' x 10' in area and each was excavated in 6" levels, the material from them being put through power screens. This made possible

much more progress than would have been the case had the usual hand methods been used throughout.

The mound sites were particularly important because they contained considerable new information pertaining to several cultural periods in the region. One of them, known as the Cool Branch Mound site, proved to be an unusually fine example of a large burial mound with accompanying village, surrounded by a palisade. The large mound was in the approximate center and the walls were constructed to conform to its orientation. The enclosure was rectilinear, measuring about 700 feet on the side, with 10-foot-square bastions or towers spaced about 115 feet apart. The data obtained indicate that this village conformed quite closely to those which occupied the Gordon sites in Tennessee, the New Madrid sites, Aztalan in Wisconsin, and even the Huff and Black Partizan sites in the middle Missouri Valley. Furthermore, the findings agree closely with the description of the town of Mauvila in Alabama which the Spaniards destroyed in 1540. The village may well have been occupied at the time of the first penetration of the Spaniards, but it apparently was abandoned and fell into ruin before the Indians had contact with the Europeans, because no materials of European manufacture were recovered during the course of the excavations. The other locations consisted in the main of former villages, and they yielded specimens representative of all the cultural periods from Early Archaic to Early Historic Creek. The data obtained from them will assist materially in developing the aboriginal history of that area.

In the last week in April Mr. Huscher resumed his activities in the Walter F. George area. During most of May he continued further excavations at the Cool Branch site, gathering data on the burial pit which lay beneath the main mound and further information about the palisade walls and general village features. Attention was then turned to an examination of nine sites, one of which had not previously been recorded. Actual excavations were conducted at six of the sites. In view of the limited time available, only three excavation squares were dug at most of them, although in one or two cases an additional square was opened. Two of the sites have particular significance. One of them on the Alabama side of the river in the Fort Benning area is presumed to be the location of the last town occupied by the Yuchi in that area. It has not definitely been identified as to name, but the information from it should help to throw considerable light on the length of time that tribe was living that far north along the Chattahoochee River after having been driven from their Tennessee and Savannah River locations. The second site is on the opposite side of the river in Georgia and may well represent an extension or continuation of the Yuchi village in Alabama.

Trade materials are present in the deposits at both locations. Those on the Georgia side, however, are much less numerous than those on the Alabama side and may indicate an earlier abandonment of that part of the village. There is close similarity between the specimens from both sites. The Georgia site actually may represent the location of one of the towns called Hlekatchka and also seems to be the most promising location for the original Captain Ellich's (Yuchi) town which was settled in the early 18th century. If it was Hlekatchka, the latter is reported to have been destroyed in 1814. Excavations on the site produced large quantities of debris indicating the burning of a house or houses, possibly the entire village, which supports the idea that it may have been that particular village. It is unfortunate that time and funds did not permit further and more extensive excavations on both sides of the river. The other sites which were tested during June contributed still more information pertaining to several aboriginal periods in the Chattahoochee Valley.

Missouri Basin.—For the sixteenth consecutive year the Missouri Basin Project continued to operate from the field headquarters and laboratory in Lincoln, Nebr. Dr. Robert L. Stephenson served as chief of the project throughout the year. Activities included surveys, excavations, analyses of materials, and reporting on results. During the summer months the work consisted mainly of excavations. Analyses and preparation of reports received the major attention throughout the rest of the year. The chronology program, begun in January 1958, was especially emphasized.

At the beginning of the fiscal year the permanent staff, in addition to the chief, consisted of three archeologists, one administrative assistant, one administrative clerk, one secretary, one scientific illustrator, one photographer, and four museum aides. On the temporary staff were two assistant archeologists, one cook, and 25 field crewmen. At the end of the year there were five archeologists in addition to the chief, one administrative assistant, one administrative clerk, one secretary, one clerk typist, one scientific illustrator, one photographer, and four museum aides on the permanent staff. The temporary staff included 4 archeologists, 5 field assistants, 3 cooks, and 83 field crewmen.

During the year there were 19 Smithsonian River Basin Surveys field parties at work in the Missouri Basin. Two of these were operating in the Oahe Reservoir area and two in the Big Bend Reservoir area of South Dakota during July and August. One small party investigated the Salt-Wahoo Watershed area in Nebraska in April; one party conducted surveys and excavations in the Pony Creek Watershed area in Iowa in May; a small party visited the Fort Sully Site in the Oahe Reservoir area in May; a survey of the

Arcadia Reservoir area in Nebraska was also made in May; during June one party was at work in the Tuttle Creek Reservoir area in Kansas, one in the Missouri Breaks area of Montana, two in the Yellowtail Reservoir area of Montana and Wyoming, four in the Oahe Reservoir area of South Dakota, and three in the Big Bend Reservoir area of South Dakota.

Other field work in the Missouri Basin included 12 parties from State institutions operating under agreements with the National Park Service and in cooperation with the Smithsonian Institution in the Inter-Agency Archeological Salvage Program.

Appropriated funds for this fiscal year were materially increased over the previous 2 years, thus permitting a substantial increase in the amount of salvage that could be accomplished. Most of this new activity came at the end of the fiscal year since the field season at the beginning was nearly completed before the new money became available. The field parties at work at the start of the year were conducting intensive excavations of key sites. Toward the end of the year, when the 1962 field season began, crews were engaged in intensive surveys of new areas, sampling of large numbers of sites in other areas, and carrying on intensive excavations at a series of key sites in several reservoir basins.

At the beginning of the year Robert W. Neuman, assisted by William G. Buckles, was directing a crew of 10 Indian laborers excavating a series of 8 prehistoric burial mounds near the Big Bend Dam in central South Dakota. Having begun work on June 7 of the previous fiscal year, this party continued in the field until September 8. Three low, dome-shaped, earthen mounds were excavated at the Sitting Crow site (39BF225).¹ The mounds, ranging from 2 feet in height and 50 feet in diameter to nearly twice that size, contained 10 intrusive historic interments representing at least 3 types of burials. These were primary burials in wooden coffins, primary burials in pits, and a secondary bundle burial. Some of the coffin burials were associated with grave posts and were scattered, singly, while others were associated with the pit burials within a circular enclosure of vertical posts. Glass, metal, wood, stone, leather, and fabric grave goods were recovered from this historic component. The burial mound complex proper was represented by single and multiple secondary burials. These remains were found scattered about on the mound floor or sometimes deposited in shallow, sub-

¹ Site designations used by the River Basin Surveys are trinomial in character, consisting of symbols for State, county, and site. The State is indicated by the first number, according to the numerical position of the State name in an alphabetical list of the United States; thus, for example, 32 indicates North Dakota, 39 indicates South Dakota. Counties are designated by a two-letter abbreviation; for example, ME for Mercer County, MN for Mountrail County, etc. The final number refers to the specific site within the indicated State and county.

mound pits. Artifact associations consist of small, triangular, side-notched points, end scrapers, marine and fresh-water shell beads, and a bipointed copper awl.

Four mounds were excavated at the Side Hill site (39BF223). The burial mound component there was essentially the same as at the Sitting Crow site, but in addition there was evidence of cremation in association with Truman Plain Rim pottery.

Only one mound was excavated at the Old Quarry site (39BF234). It was found to contain a portion of a wooden log, a bison skull, and concentrations of hematite on the mound floor. Two large, subfloor pits were located near the mound center and each contained secondary burials of seven to nine individuals. A single artifact, a large undiagnostic body sherd, was recovered from one pit. A bison skull also was found in the same pit.

While testing below the mounds at the Sitting Crow and Side Hill sites, two, and possibly three, stratified, lithic components were located. The deepest component was indicated by a zone of charcoal-stained soil containing stone chips. The intermediate component was in a light-colored soil zone and contained thin, triangular points with concave bases, end scrapers, knives, worked and unworked chips, bison bone fragments, and shallow basin-shaped firepits. The uppermost lithic component is typologically similar to the McKean complex represented at various sites in western South Dakota and eastern Wyoming.

During the last week of the field season, all the 46 mounds between Fort Thompson and Campbell Creek were mapped. They range from 25 to 80 feet in diameter and from 1 to 4 feet in height. The tumuli sometimes occur singly and in other instances are in groups.

The second Smithsonian Institution field party at work at the beginning of the year was directed by Dr. Warren W. Caldwell, assisted by Richard E. Jensen. With a crew of 11 men, they had begun work on June 13 of the preceding year and continued through August 22. The entire time was devoted to excavations at the Pretty Head site (39LM232). This site is situated on the right bank of the Missouri River in the lower portion of the Big Bend Reservoir area. Two houses were completely excavated, a third was excavated except for the heavy fill marking one corner, two midden areas were extensively tested, a defensive moat was sectioned in several places, and the old occupation surface between two houses was cleared.

The site is roughly a rectangular area of hillocks and depressions capping the riverward edge of Terrace 1, which stands about 60 feet above the summer stage of the Missouri River. A number of oval depressions were arranged in irregular rows paralleling the cutbank of the river. These proved to be the remains of houses, although

the orientation was not consistent and the village pattern was by no means as regular as had been anticipated. The village had only one extended occupation. It appears that the houses had been arranged in streets or blocks but subsequent growth was haphazard and unplanned. There is further support of this view in relation to the defensive features of the village. The entire occupation area is mantled by midden debris and wind-blown silts to such an extent that the moat was completely obscured. At least one late house (Feature 7) was built athwart the moat, which was already filled with refuse and could have had but little usefulness for defensive purposes. Feature 7 was smaller and less complex than the other houses.

Mantling all the houses were several soil zones, the earliest of which was particularly evident. It is tempting to equate this with a severe drought in the Central Plains during the last quarter of the 13th century. Drought conditions may well have been a disruptive factor that brought progressive changes and collapse to this village. The houses excavated (Features 2, 4, and 7) were uniformly of the long rectangular type but differed in details. All were deep, with floors excavated 2 to 3 feet below the old occupation surface, which in turn was 2 to 4 feet below the present surface. In each the floor had been painted with a red, mineral paint and in Feature 4 there were two such painted floors separated by 0.2 foot of sterile fill. The entrance to each house was a wide ramp from the old surface to the floor. In Feature 4, the ramp led across a wide platform and ended in a low step. On either side of the ramp was a narrow trench that continued across the front of the trench, separating it from the house proper. There was a similar trench in Feature 2.

A large number of bell-shaped cache pits were found beneath the floor of Feature 2, but not in the other houses. Features 2 and 4 contained much bison bone, particularly skulls, lying on the floor and within the mantling fill. They were notably absent from Feature 7, suggesting a change in cultural emphasis or perhaps in local ecology. In each house the firepit was located on the centerline just inside the inner end of the ramp. Superstructures of all three houses were nearly identical. Posts 2 or 3 feet apart were set at the base of the wall excavation and, except for the entrance, continued around the entire perimeter. Central posts were absent but were replaced by roof supports in two rows, each a short distance from the centerline.

A large area between Features 2 and 4 was cleared to the old surface and two thick midden deposits were trenched. The defensive moat was located and sectioned in six places, tracing it through Feature 7 and around a bastioned corner. Uniformly the moat was 3 to 5 feet deep with a maximum width of 10 feet. The accompanying stockade was not discernible. Artifacts were abundant in the midden



1. Smithsonian River Basin Surveys crew excavating two burial pits at the Old Quarry Mound, Big Bend Reservoir, South Dakota. These pits contained bones of both infants and adults.



2. Smithsonian River Basin Surveys crew skimming the floor of a long, rectangular house following dragline pass at the Pretty Head site, Big Bend Reservoir. The dragline was found very effective in moving large amounts of overburden.



1. Long, rectangular house excavated at the Pretty Head site. Crewman is sitting in the remnant of a ditch that extended the length of the house. The floor of the house, except where disturbed by the ditch, was covered with a deposit of red ocher. River Basin Surveys.



2. Aerial view of the Potts Village, Oahe Reservoir, South Dakota. The Missouri River is in the background. At maximum pool elevation the Oahe Reservoir will be about 15 feet above this site. The excavations outlined in the fortified area indicate the house structure within it. River Basin Surveys.

areas and the house fill. Pottery was mainly of the Foreman types, but there was also much Over Focus pottery. Probably the cultural position of the site is intermediate between the Monroe-Anderson Foci, where Foreman Ware is frequent, and the Over Focus. Nonceramic artifacts were not distinctive, but a fragment of copper and a long bone object resembling an arctic snow beater are notable. These two objects suggest trade with the north, and the architecture of the houses is remarkably similar to certain examples reported for the northern Plateau. It seems suggestive that the Early Village people of the Plains may have cultural ties not hitherto recognized.

The third Smithsonian field party at work at the beginning of the year was directed by Dr. Robert L. Stephenson, assisted by Lee G. Madison. With a crew of 10 men they had begun excavations on June 19 of the previous year and continued work through August 31. Most of the season was spent on excavations at the Potts Village site (39CO19) on the right bank of the Missouri River, just south of Mobridge, S. Dak., in the Oahe Reservoir area. All or parts of seven houses were excavated, the fortification ditch was tested in several places, middens and cache pits were sampled, the entire stockade was uncovered, and the single loop bastion and two bastioned entrances were completely excavated.

This is the site of an early La Roche village that probably dates from about the late 15th or early to middle 16th century. It is entirely precontact, and no items of White origin were found in any part of the excavations. The site consisted of the remains of about 30 circular earthlodges, grouped in a long, oval area along the edge of the second terrace above the Missouri River. Within the village 11 houses, including a large ceremonial lodge, were encircled by a deep, narrow fortification ditch and palisade. The ditch was 6 to 8 feet in depth and 10 to 20 feet wide. The palisade was composed of upright cedar, cottonwood, and oak posts set close together. A single large loop bastion protected the north and west sides of the fortified area and a steep bank protected the east and southeast sides (toward the river).

Architectural details of the entrances to these fortified villages along the Missouri River have not previously been determined. On the basis of some evidence, simple overlapping lines of stockade posts with a passageway between have been presumed. At the Potts site two examples of a very distinctive entrance were clearly defined. In this type of entrance the stockade line curved outward and then back in toward the center of the fortified area to form a small loop bastion about 10 feet in diameter, but with one side forming a straight line of posts extending some 10 to 15 feet into the village. Parallel to the straight line of posts was another similar line about 4 feet from it

that extended outward from the fortified area and curved around to form a small loop bastion about 8 feet in diameter and then recurve back to join the regular line of the palisade posts. Thus the entrance consisted of two small, loop bastions with a narrow passageway between them that ran some 10 feet back into the fortified area. Opposite the narrow passageway was a ramp across the fortification ditch. One entrance was to the north, the other to the south.

Outside the fortified area the two houses that were partially excavated appeared of the same structural type and artifact content as those that were within the fort. The architecture was of the four center post pattern with widely spaced wall posts, leaner posts, and short entrances, forming a circular earthlodge of some 28 to 45 feet in diameter. Artifacts from the site include abundant pottery, bone, stone, and shell objects. The pottery is unusually homogeneous and well within the earliest of the La Roche tradition. Elaborate or spectacular objects were almost entirely lacking, although a few shell ornaments and catlinite pipes were recovered.

One week was spent in August by this party in excavating a portion of the Blue Blanket Island site (39WW9), located on an island in the Missouri River just north of the Potts Village site. This was a late village of circular earthlodges encircled by a wide, shallow fortification ditch and palisade. The palisade formed a nearly circular pattern enclosing less than 20 houses with no evidence of houses outside it. The ditch was but 2 or 3 feet deep and 20 to 25 feet wide. Half of one house was excavated, the ditch and palisade were sampled in several places, and a dozen random test squares were dug.

Stockade posts as well as outer wall posts of the house were split timbers set close together with the bark side in. Burning caused good preservation of the structural features. Inside the row of split wall timbers of the house were large, whole support posts spaced every 6 or 7 feet to form main roof and wall supports. The four main center posts were large, whole posts. The entrance was short but unusually well made. Pottery and other artifacts were not abundant but metal objects were present. The village apparently is one of those viewed by Lewis and Clark as a recent ruin in 1804, and probably dates from the last quarter of the 18th century until about 1802 or 1803. Access to the site each day was by motorboat from the right bank of the river near the Potts Village site.

The fourth Smithsonian field party at work during the early part of the fiscal year consisted of a crew of four men directed by Dr. William M. Bass. They worked from August 7 to 18 and excavated 40 burials from the Sully site (39SL4), some 19 miles northwest of Pierre, S. Dak., on the left bank of the Missouri River. Dr. Bass spent two previous seasons on burial excavations at that site and has

recovered a total of 264 interments there. It was thought that the brief stay during the 1961 season would exhaust the burial area and give a good statistical sample of a single population. However, it became evident that more burials are to be found there and plans were made to continue the work in the 1962 season. The Sully site unquestionably offers a better opportunity than any other to obtain a really meaningful sample of the protohistoric Arikara physical types in the Missouri Basin. Numerous artifacts were recovered with the burials. They include catlinite pipes, wooden pipe stems, a whole pottery vessel, glass and copper beads, woven mats, and bone tools.

The 1962 field season began early this year with a brief survey of the area to be flooded by the several proposed small reservoirs in the Salt-Wahoo Drainage Basin in Lancaster and Seward Counties, southeastern Nebraska. Robert W. Neuman, assisted by Lionel A. Brown and John W. Garrett, the latter a member of the staff of the Nebraska State Historical Society, spent April 5 and 6 investigating the areas designated as Dams 4, 8, 13, and 17. This initial survey revealed nothing of archeological interest in proposed flood areas of these four reservoirs. Construction activities at these dams should be watched, however, when the time comes for building the dams, as buried sites of the Archaic and Woodland periods might then be discovered.

The second Missouri Basin Project field party for the new season began work in the Pony Creek Drainage area of Mills County, southwestern Iowa, on May 1. There the Soil Conservation Service is building a series of small reservoirs and terracing large areas as protection against erosion. Lionel A. Brown, assisted first by Wilfred M. Husted, and later by Lee G. Madison, made an intensive survey of the area in immediate danger of destruction, and then with a crew of 3 men tested 7 of the 16 sites located. They completed the season's work on May 25. One house was excavated in each of three sites, 13ML205, 13ML206, and 13ML216. Extensive tests were made in sites 13ML201, 13ML204, 13ML208, and 13ML215. This party recommended further investigations in all of the sites, 13ML201 through 13ML216 except 13ML201, 13ML213, 13ML214, and 13ML215, which will either be out of danger of damage from construction or have no promise of yielding useful archeological information. The houses excavated were square to rectangular in shape and provided artifacts suggestive of the Aksarben Aspect and related materials.

The third field party, consisting of G. Hubert Smith and Jerry L. Livingston, visited the historic site of Fort Sully (39SI45) in Sully County, north of Pierre, S. Dak., during the period of May 15-18 for the purpose of making a topographic map of the site, but heavy rains made this impossible.

The fourth party, Smith and Livingston, made a survey of the area to be flooded by the Arcadia Dam in Custer County, Nebr., on May 19 and 20. One site, 25CU202, was located within the reservoir area, but it appeared to be of little archeological value.

On June 12, the fifth and sixth Missouri Basin field parties left for the field. Party No. 5, directed by Robert W. Neuman and assisted by John J. Hoffman and a crew of 10, began work on the early circular house village known as the Mostad site (39DW234) and by the end of the year was well along on the excavation of the fortification system of that site. Party No. 6, also directed by Neuman but assisted by James J. Stanek and a crew of 10, began work on the 2 burial mounds at the Swift Bird site (39DW233). By the end of the year this party had cleared a large part of one mound and was excavating the burial chamber within it. Both sites are on the right bank of the Missouri River some 8 miles south of Mobridge, in Dewey County, S. Dak., and will be in the bank-slumping area of the Oahe Reservoir. The two parties were camped together in the area between the two sites.

The seventh and eighth Missouri Basin Project field parties left for the field on June 7. Party No. 7, directed by Dr. Warren W. Caldwell and assisted by Richard T. Jensen and a crew of 11, began work on the Langdeau site (39LM209) in the neck of the Big Bend in the Big Bend Reservoir just above Lower Brule, Lyman County, S. Dak. By the end of the year this crew was well along with the excavation of three houses of long-rectangular pattern. Party No. 8, also directed by Dr. Caldwell but assisted by Richard E. Carter and a crew of nine, began work on site 39LM2, overlooking Medicine Creek, near the neck of the Big Bend in the Big Bend Reservoir, some 8 miles above Lower Brule, Lyman County, S. Dak. By the end of the year this crew had completed the excavation of one circular house but was finding evidence of an earlier occupation of the long-rectangular house period. These two parties were camped together at the Crazy Bull School House near Lower Brule.

The ninth Missouri Basin Project field party, under the direction of G. Hubert Smith assisted by Lee G. Madison and a crew of eight, left for the field on June 12. Based in Pierre, S. Dak., this crew at the end of the fiscal year was making progress on the excavations at the historic site of Fort George (39ST202) some 15 miles downstream from Pierre in Stanley County, in the area to be flooded by the Big Bend Reservoir. Prehistoric occupations lie beneath the historic fur trading post at that site and both historic and prehistoric components were being excavated.

The tenth Missouri Basin Project field party, directed by Dr. William M. Bass and assisted by Jon Muller and a crew of six, left Lin-

coln on June 7. Also based in Pierre with the Smith party, this crew, with the aid of heavy equipment, by the end of the year had excavated approximately 89 burials from a new area at the Sully site (39SL4) some 23 miles upriver from Pierre in Sully County. The rising waters of the Oahe Reservoir were beginning to encroach upon the site at that time. So far over 350 burials have been recovered from this one protohistoric Arikara site.

The eleventh Missouri Basin Project field party, directed by Dr. Alfred W. Bowers, assisted by William B. Colvin and a crew of 10, left for the field on June 14. Based in Mobridge, S. Dak., this party began excavating at the two adjacent sites, 39CO14 and 39CO34, at the mouth of the Grand River in Carson County. These sites are in the bank-slumping area of the Oahe Reservoir and were substituted for others that had become unavailable for excavation owing to impoundment of Oahe Reservoir waters. By the end of the year tests in middens, excavations of lodges, and samples of the fortification system were progressing well.

The twelfth field party, not scheduled to begin work until early in the following fiscal year, was to go to the Big Bend Reservoir.

The thirteenth Missouri Basin field party, directed by Lionel A. Brown with a crew of five, left for the field on June 13, and after a tortuous trip by pack train down Black Canyon into the Big Horn Canyon made camp at the confluence of the two canyons. The group began excavation of site 24BH215, adjacent to the party camp, in the bottom of the Big Horn Canyon some 6 miles upstream from the location of the Yellowtail Dam, Big Horn County, Mont. The site proved to be a large camping area and a few projectile points and potsherds had been recovered by the end of the year.

Party No. 14 also left for the field on June 13. It consisted of Wilfred M. Husted with a crew of five. The party established camp near the upper end of the Horseshoe Bend of the Big Horn River in Big Horn County, Wyo., in the upper reaches of the Yellowtail Reservoir area. They tested one site and partially excavated another but the terrain proved to be so rough that work without a boat was impractical. At the end of the year the men were making intensive foot surveys of that end of the canyon. There were prospects of obtaining a boat so that excavations could be resumed early in the coming fiscal year.

Party No. 15 left for the field on June 13 with Oscar L. Mallory in charge of a crew of three. This group began an archeological survey along the Missouri River between Fort Benton, Mont., and the upper reaches of the Fort Peck Reservoir. This is known as the Missouri Breaks area. Beginning near Fort Benton, the party had surveyed some 20 miles of the area by the end of the fiscal year and had located 19 sites, mostly tipi sites and rock cairns.

The sixteenth Missouri Basin Project field party, directed by Carl F. Miller, with a crew of nine, left for the field on June 15 and established headquarters in the town of Blue Rapids, Kans. By the end of the year this party had examined three of the sites in the upper reaches of the Tuttle Creek Reservoir in Marshall County, northeastern Kansas, and had begun testing one of them (14MH70).

Cooperating institutions working in the Missouri River Basin at the beginning of the fiscal year included six field parties, representing five State agencies in Nebraska, Kansas, South Dakota, and Missouri. Dr. Preston Holder, with a crew of students from the University of Nebraska, completed work during July on the Leavenworth site (39CO9), 10 miles north of Mobridge, S. Dak., in the Oahe Reservoir area. Dr. Carl H. Chapman and a crew from the University of Missouri continued the survey and testing of sites in the Kaysinger Bluff Reservoir area on the Osage River in west-central Missouri during the period July to September. In addition, Chapman had a University of Missouri crew at work on the survey of the Stockton Reservoir in a branch of the Osage River in Cedar and Dade Counties, Mo. Thomas A. Witty with a group from the Kansas State Historical Society was excavating the Woods site (14CY30) and testing several other sites in the Milford Reservoir area on the Republican River in Geary County, Kans. Roger T. Grange and a crew from the Nebraska State Historical Society was at work in the Red Willow Reservoir basin in Frontier County, southwestern Nebraska. This reservoir is nearly completed and by the end of this field season will begin to fill. Dr. Preston Holder, assisted by Dr. Emily Blasingham and a crew of students from the University of Nebraska, was at work on excavation, testing, and survey of sites in the Norton Reservoir area of northwestern Kansas. Dr. Carlyle S. Smith, assisted by Walter Birkby and a crew of students from the University of Kansas, began work in June excavating two key sites and testing several others in the Melvern Reservoir area in Osage County, east-central Kansas. Dr. Carl H. Chapman and a crew from the University of Missouri were continuing the survey and testing of sites in the Kaysinger Bluff Reservoir area in west-central Missouri and, with a second crew, was at work sampling sites in the Stockton Reservoir area in Cedar and Dade Counties, Mo. All the cooperating institution parties mentioned above were operating under agreements with the National Park Service and cooperating with the Smithsonian Institution in the Inter-Agency Archeological Salvage Program.

During the time that the Missouri Basin Project archeologists were not in the field, they were engaged in analyses of their materials and in laboratory and library research. They also prepared manuscripts of technical reports and wrote articles and papers of a more popular nature.

The Missouri Basin Chronology Program by the end of the year had been in operation 3½ years, having been begun by archeologists of the Missouri Basin Project in January 1958. Cooperation and continued participation by most of the archeologists in the Plains area have been most encouraging. Especial emphasis last year was on the dendro-chronological section of the program, particularly the master chart for the Fort Thompson-to-Cheyenne River area. During the fiscal year many wood samples from prehistoric houses were matched to this chart and considerable effort was devoted to the refinement of the laboratory techniques of tree-ring study being used in the Lincoln office. To this end additional equipment was purchased, such as microscopes, a De Rouen Dendrochronograph, a power sander, and an increment borer. Also, consultations and advice were sought from the staff of the laboratory of tree-ring studies at the University of Arizona, and much assistance was obtained from these discussions.

The carbon-14 section of the Chronology Program received major attention throughout the year. Seven additional dates were obtained from charcoal samples submitted to the University of Michigan Memorial Phoenix Laboratory. In addition to this source of C-14 dates, an agreement was entered into between the Chronology Program and Isotopes Incorporated, of Westwood, N.J., under the direction of Milton Trautman, to date a series of charcoal specimens. The agreement with Isotopes Incorporated has resulted in 19 dates so far derived from the Missouri Basin Chronology Program.

The laboratory and office staff spent its full effort during the year in processing specimen materials for study, photographing and illustrating specimens, preparing specimen records, and typing, filing, and illustrating record and manuscript materials. The accomplishments of the laboratory and office staff are listed in tables 1 and 2.

Dr. Robert L. Stephenson, chief, when not in charge of field parties, devoted a large part of his time to management of the over-all Missouri Basin Project. His individual archeological research and report writing were minimal during the year, but he made some further progress on the monograph reporting the "Archeological Investigations in the Whitney Reservoir, Texas" and on the analyses of specimens from the Sully site (39SL4) in the Oahe Reservoir. Throughout the year he continued to serve as chairman of the Missouri Basin Chronology Program, as assistant editor of "Notes and News in the Plains Area" for *American Antiquity*, and as associate editor of the *Plains Anthropologist*. At the 19th Plains Conference for Archeology, held in Lawton, Okla., on Thanksgiving weekend, he served as chairman of the session on "Salvage Archeology in the Plains" and presented a paper on "Three Smithsonian Salvage Sites" and also one on "Historic Montana Burials."

Dr. Stephenson attended the meeting of the "Committee for the

Recovery of Archeological Remains" held in Washington, D.C., on February 8-9 and reported on the Missouri Basin Project activities of the past 2 years and the prospects for the coming year. He attended the annual meeting of the Nebraska Academy of Sciences in Lincoln on April 13. During the period April 15-22 he was in Austin, Tex., serving as technical adviser and making studio sequences for a motion picture on salvage archeology in the Plains area. From April 28 to May 8 he attended the Society for American Archeology annual meeting at Tucson, Ariz., where he presented a paper on "Administrative Problems of the River Basin Surveys." While in Tucson he conferred with the staff of the Laboratory of Tree-Ring Research and of the Geochronology Laboratory of the University of Arizona. During the year he wrote several book reviews for scientific journals and gave talks to various local civic organizations. Among the latter was the Omaha, Nebr., Kiwanis Club meeting to honor Dr. Ahmed Fakhry and the Tutankhamun exhibit at Joslyn Art Museum on May 9, and the meeting of the planning committee for the Heartland Exhibit at the New York World's Fair in 1964-65, held in Omaha on May 17. From June 17 to 24 he visited the field parties in Montana and at the end of the year was back in the Lincoln office.

Lionel A. Brown, archeologist, joined the staff on April 2 and spent the ensuing month in the Lincoln office learning field and laboratory procedures and preparing for the summer's field work. He was in the field from May 1 to 25 conducting surveys and excavations in the Pony Creek Drainage area of southwestern Iowa. On June 13 he again left for the field, where at the end of the year he was excavating in the Yellowtail Reservoir in Montana.

Dr. Warren W. Caldwell, archeologist, when not in charge of field parties, devoted most of his time to analyses of specimen materials he had recovered from salvage excavations in previous years. He completed two drafts of a monograph entitled "Archeological Investigations at the Black Partizan site (39LM218), Big Bend Reservoir, South Dakota," and that is now ready for final revision. He continued sporadic work on the revision of his manuscript "The Archeology of Wakemah," wrote several reviews for various scientific journals, and had the following three technical articles and one monograph published: "Archeological Excavations at the Coralville Reservoir, Iowa," published in Bureau of American Ethnology Bulletin 179, River Basin Surveys Paper No. 22, 1961; "Tree Ring Investigations in Central South Dakota," published in abstract in the Proceedings of the 72d Meeting of the Nebraska Academy of Sciences, 1962; "Tree Ring Dating and the Village Cultures of South Dakota," published in *Progress of the Interior Missouri Basin Field Committee*, 1962; and "The Missouri Basin Chronology Program, Statement No. 3," published by offset in the Missouri Basin Project office, 1962.

Throughout the year he served as collaborator for the Plains area on *Abstracts of New World Archeology* and prepared abstracts of 10 articles for that publication. In addition, he served as contributing editor for Plains literature and reviews for the *Plains Anthropologist*, and (on annual leave) as part-time assistant professor of anthropology at the University of Nebraska, as well as continuing his position as chairman of the dendrochronology section of the Missouri Basin Chronology Program. On April 14 he attended the annual meeting of the Nebraska Academy of Sciences where he presented a paper entitled "Tree Ring Investigations in Central South Dakota" and served as a panel discussant in a symposium on "Modern Research Methods in the Field of Ethnohistory." He attended the 27th annual meeting of the Society for American Archeology in Tucson, Ariz., on May 3-5, where he participated in a symposium on "Tree Ring Dating" and also conferred with the staff members of the Laboratory of Tree Ring Research and the Geochronology Laboratory at the University of Arizona. At the end of the year he was again engaged in excavating archeological sites in the Big Bend Reservoir area.

Wilfred M. Husted, archeologist, joined the staff on April 16 and spent the rest of that month in the Lincoln office learning field and laboratory procedures and preparing for the summer's field work. During May 1-11 he was in the field with Brown in the Pony Creek Drainage area in Iowa. On June 13, he again left for the field where, at the end of the year, he was excavating in Yellowtail Reservoir area in Wyoming.

Robert W. Neuman, archeologist, when not in the field conducting excavations, was at work analyzing archeological materials he had previously excavated in the Big Bend and Oahe Reservoir areas. He completed one monograph entitled "The Good Soldier Site, Lyman County, South Dakota," which will appear as River Basin Surveys Paper No. 37 in Bulletin 189 of the Bureau of American Ethnology. The major portion of his laboratory research time was devoted to an analysis of data and the development of a trait list for burial mounds in the Middle Missouri and northern Plains areas, the compilation of a report on preceramic horizons in the Fort Thompson vicinity, and an article on check-stamped pottery in the northern and central Plains. Throughout the year he served as chairman of the carbon-14 section of the Missouri Basin Chronology Program. Over the Thanksgiving weekend he attended the Plains Conference for Archeology at Lawton, Okla., where he presented a paper on "The 1961 Missouri Basin Project Field Season" and another on "Historic Indian Burials near Fort Thompson." On April 13 he attended the annual meeting of the Nebraska Academy of Sciences in Lincoln and presented a paper entitled "Check Stamped Pottery on the Central and Northern Plains," which was published in abstract in the proceedings of the meeting.

On May 4-5 he attended and participated in the annual meeting of the Central States Anthropological Society in St. Louis. At the end of the year he was again in the field conducting archeological excavations.

G. Hubert Smith, archeologist, was on duty at the first of the year in the Lincoln office continuing work on the comprehensive report of investigations at the site of Like-a-Fishhook Village and Fort Berthold I and II (32ML2), in the Garrison Reservoir, North Dakota. He devoted most of his efforts during the year to this report and had completed most of a first draft of it by the end of the year. During the period July 21-29 he accompanied the chief on a trip to Montana and Wyoming, particularly to consult with Bureau of Reclamation officials in regard to the salvage and preservation of Fort C. F. Smith at the mouth of the Big Horn Canyon in Montana, near the construction area of the Yellowtail Dam. He attended the 19th Plains Conference for Archeology at Lawton, Okla., on Thanksgiving weekend and served as chairman of a session on "Historic Sites Archeology and Ethnography." On April 13 he attended the annual meeting of the Nebraska Academy of Sciences in Lincoln and participated in a symposium on "Research Methods in Ethnohistory." On May 5 he attended and participated in the annual meeting of the National Trust for Historic Preservation held in Omaha, Nebr. Throughout the year he served as chairman of the historic documentation section of the Missouri Basin Chronology Program and as a member of the editorial board of the *Plains Anthropologist*.

During the period of May 15-20 he was in the field visiting the Fort Sully site in the Oahe Reservoir area of central South Dakota and making an archeological survey of the Arcadia Reservoir area in central Nebraska. On June 12 he returned to the field where he was again conducting excavations in the Big Bend Reservoir area at the end of the year.

TABLE 1.—*Specimens processed, July 1, 1961-June 30, 1962*

Reservoir	Number of sites	Catalog numbers assigned	Number of specimens processed
Arcadia	1	5	29
Big Bend	9	2, 435	64, 892
Fort Randall	1	5	8
Lewis and Clark	1	4	20
Oahe	9	1, 971	17, 457
Sites not in a reservoir area	5	325	1, 274
Total	26	4, 745	83, 680

As of June 30, 1962, the Missouri Basin Project had cataloged 1,339,396 specimens from 2,152 numbered sites and 59 collections not assigned site numbers.

Specimens restored: 5 pottery vessel sections.

Specimens donated to the Missouri Basin Project for comparative use:

Thirty-one pot rim sherds representing Fort Rice and Huff wares—State Historical Society of North Dakota, courtesy of W. Raymond Wood.
 Thirty-one trade beads—University of Texas, courtesy of Edward B. Jelks.
 Three United States Army buttons dating 1850-70—courtesy of S. J. Olsen, Florida Geological Survey.

TABLE 2.—Record material processed, July 1, 1961–June 20, 1962

MISSOURI BASIN PROJECT

Reflex copies of records	3, 809
Photographic negatives made	1, 135
Photographic prints made	3, 392
Photographic prints mounted and filed	1, 673
Transparencies mounted in glass	564
Kodachrome pictures taken in lab	156
Cartographic tracings and drawings	55
Illustrations	29
Lettering of plates	10
Profiles drawn	33
Plate layouts made for manuscripts	10

Virginia.—An archeological reconnaissance was made during the period from April 3 to May 11 at the Smith Mountain Project on the Roanoke River in southern Virginia. That is an Appalachian Power Co. undertaking and consists of the construction of two dams—Smith Mountain and Leesville—which will provide water for power purposes. The two reservoirs they will form will be located in Bedford, Franklin, and Pittsylvania Counties, Va. The survey was made by Carl F. Miller. His work was greatly facilitated by complete cooperation on the part of personnel of the Appalachian Power Co. and the Nello L. Teer Construction Co. The power company provided a helicopter which made possible a study of the reservoir areas from the air and also the taking of aerial photographs of the more important sites.

Mr. Miller located and recorded 35 sites in the Smith Mountain basin and 17 sites in the Leesville basin. Of the total of 52, only 1 will not be endangered by the inundation of the 2 areas. However, after careful examination of the surfaces and the testing of some sites, Mr. Miller concluded that only four of them merited excavation and detailed study. Three are in the Smith Mountain basin, while the fourth is in the Leesville basin. The sites cover the Early, Middle, and Late Woodland periods, involving a timespan beginning about 3000 B.C. and lasting to about A.D. 1000. They are significant be-

cause of the fact that they occur upstream from the James H. Kerr Reservoir where extensive archeological studies were made several years ago and, while related to the manifestations present there, they appear to contain some cultural elements which were not found farther downstream. Excavations will be made at Smith Mountain during the next fiscal year.

ARCHIVES

The Bureau archives continued under the custody of Mrs. Margaret C. Blaker, archivist.

Following the death of Dr. John P. Harrington, extensive series of his linguistic and ethnographic notes relating to numerous North American Indian tribes were returned from private storage and deposited with the Bureau through the courtesy of his daughter, Miss Awona W. Harrington. This material is voluminous and has become disarranged during years of storage. To serve as a preliminary guide, a list of the manuscripts, with particular attention to those dealing with Indian languages of California, was prepared by Miss Catherine Callaghan, scientific linguist.

A collection of letters, family records, and photographs from the estate of Matilda Coxe Stevenson, relating mainly to Mrs. Stevenson, although some pertained to her husband, Col. James Stevenson, was received as a gift from Manning Gasch of McLean, Va.

Two copybooks containing Micmac ideograms and an interlinear transcription of the Micmac words written about 1943 by Frank Navin, an Indian of Cape Breton, Nova Scotia, were lent by the Rev. Father Placide, O.F.M., Cap., Ristigouche, Quebec, to be microfilmed for the Bureau archives.

A collection of over 4,000 photographic prints relating to North American Indian tribes was transferred from the U.S. National Museum. The prints have been sorted and arranged by cultural area and tribe, but much remains to be done in tracing the original accession data in order to determine actual or terminal dates and other relevant background information.

Forty-two photographs relating to several Hopi pueblos, taken by Miss Margaret Brainard in 1929-31, 1938, and 1950, were donated by her.

Thirty-six color transparencies of North Carolina and Oklahoma Cherokee, taken by Raymond Fogelson in 1960, were donated by him.

Thirty-three photographs of persons of Indian descent living in Virginia, Maryland, Delaware, Maine, and Quebec, taken by Daniel Kennedy in 1960 and 1961, were donated by him.

Sixteen photographs of Chippewa Indians taken in 1905 at Grand Marais and Grand Portage, Minn., by Frances Densmore before she became affiliated with the Bureau were donated by Eliot Davis,

superintendent of Grand Portage National Monument, Grand Marais, Minn.

Seven photographs of western Indians were lent for copying by Vernon M. Riley of Chino, Calif.

As in previous years the manuscript and photographic collections were consulted by numerous scholars and members of the general public. There were approximately 175 written and personal inquiries about manuscripts, including requests for microfilm copies, and approximately 600 inquiries about and requests for photographic prints. Over 2,450 photographs were prepared and distributed, an increase over last year's figure.

ILLUSTRATIONS

The illustrator devoted most of his time to preparing and completing a variety of tasks in the fields of archeology, anthropology, and ethnology. Work was also prepared for the River Basin Surveys and for several other branches of the Institution.

LIBRARY

A reference librarian was appointed for the Bureau of American Ethnology Library in May 1962, to provide library services for the staffs of the Bureau and other branches of the Smithsonian Institution, and other qualified scholars. Rearrangement of the library's collection has already been completed, and it is planned to organize and maintain the collection so that it will realize its potential usefulness.

In the process of shifting materials, various interesting publications have attracted attention, among them what seems to be the original *Circular in Reference to Degrees of Relationship Among Different Nations* by Lewis Henry Morgan and a good collection of congressional reports pertaining to Indian affairs beginning with the 12th Congress. Several early editions of encyclopedias, dictionaries, and gazetteers have been gathered together and made more accessible for the patrons.

The valuable reprint collection has been organized and an author index made with assistance of summer student employees.

Special emphasis will be placed on the strengthening of this library's collection by filling gaps in important serial runs, reactivating and following up on exchange materials, and the acquisition of important works, both retrospective and current.

EDITORIAL WORK AND PUBLICATIONS

The editorial work of the Bureau continued during the year under the immediate direction of Mrs. Eloise B. Edelen. The following publications were issued:

Seventy-eighth Annual Report of the Bureau of American Ethnology, 1960-61.
ii+33 pp., 2 pls. 1962.

Bulletin 175. Mohave ethnopsychiatry and suicide: The psychiatric knowledge and the psychic disturbances of an Indian tribe, by George Devereux. vi+586 pp., 10 pls. 1961.

Bulletin 179. River Basin Surveys Papers, Nos. 21-24, Frank H. H. Roberts, Jr., editor. xviii+337 pp., 56 pls., 43 figs. 1961.

No. 21. Excavations at Texarkana Reservoir, Sulphur River, Texas, by Edward B. Jelks.

No. 22. Archeological investigations at the Coralville Reservoir, Iowa, by Warren W. Caldwell.

No. 23. The McNary Reservoir: A study in Plateau archeology, by Joel L. Shiner.

No. 24. The Sheep Island site and the Mid-Columbia Valley, by Douglas Osborne, Alan Bryan, and Robert H. Crabtree.

Bulletin 183. Seneca Thanksgiving rituals, by Wallace L. Chafe. iii+302 pp. 1961.

Publications distributed totaled 19,326, as compared with 29,845 for the fiscal year 1961.

COLLECTIONS

The following collections were made by staff members of the River Basin Surveys of the Bureau of American Ethnology and transferred to the permanent collections of the Department of Anthropology, U.S. National Museum:

Acc. Nos.

236771, 238626, 238627----- 11,560 miscellaneous stone, bone, and shell archeological specimens from various localities in the United States.

MISCELLANEOUS

Dr. M. W. Stirling, Dr. A. J. Waring, and Sister Inez Hilger continued as research associates. Dr. John P. Harrington, linguist on the staff of the Bureau from February 20, 1915, until his retirement on April 30, 1954, and later research associate, died on October 21, 1961, in San Diego, Calif., after many months' illness.

Dr. Wallace L. Chafe worked part time during the academic year 1961-62 so that he could teach linguistics in the graduate school at Catholic University of America.

Robert M. Laughlin reported for duty on June 10 as ethnologist specializing in the Middle American area.

The Bureau revised and reissued during the fiscal year the following bibliographies and lists:

SIL-47, rev., 8/61: Selected bibliography on the Battle of the Little Big Horn. 5 pp.

SIL-99, rev., 3/62: Bibliography on American Indian medicine and health. Compiled by William C. Sturtevant. 39 pp.

SIL-65, 3d rev., 3/62: Introductory bibliography on the American Indian. 7 pp.

SIL-53, rev., 4/62: Photographic collections of the Bureau of American Ethnology. 2 pp.

SIL-90, rev., 4/62: Some dealers in second-hand anthropological and government publications. 2 pp.

SIL-50, 4th rev., 6/62: Selected list of portraits of prominent Indians in the collections of the Bureau of American Ethnology. 3 pp.

SIL-81, rev., 6/62: Selected bibliography on stone-chipping methods. 4 pp.

Although the 3,227 letters received in the director's office during the year indicate a decrease from the previous year, the total is well above the average for the past several years. This number, of course, does not include semiofficial letters received by staff members from colleagues and interested individuals. Because the Bureau does not maintain a mailing list for its bibliography series, many college and university librarians write in for complete sets and for information leaflets. About 8,000 informational items were mailed from the main Bureau office in response to requests for such material. The above totals do not include Bureau material and publications sent out by the Editorial and Publications Division. Many lots of specimens were received by mail or brought to the office for identification and for such information as could be provided by Bureau specialists.

Respectfully submitted.

FRANK H. H. ROBERTS, Jr., *Director.*

Dr. LEONARD CARMICHAEL,
Secretary, Smithsonian Institution.

Eightieth Annual Report

of the

BUREAU OF AMERICAN ETHNOLOGY

1962-1963



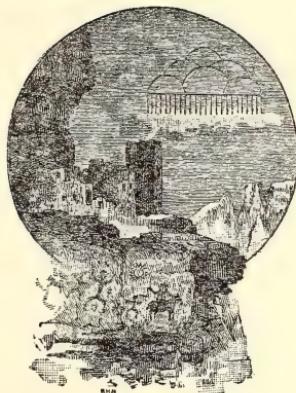
SMITHSONIAN INSTITUTION
WASHINGTON
D.C.

EIGHTIETH
ANNUAL REPORT OF THE

BUREAU OF
AMERICAN ETHNOLOGY

TO THE SECRETARY OF THE
SMITHSONIAN INSTITUTION

1962-1963



UNITED STATES
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BUREAU OF AMERICAN ETHNOLOGY

June 30, 1963

Director.—FRANK H. H. ROBERTS, Jr.

Anthropologists.—HENRY B. COLLINS, WILLIAM C. STURTEVANT, ROBERT M. LAUGHLIN.

Research Associates.—SISTER M. INEZ HILGER, MATTHEW W. STIRLING, A. J. WARING, Jr.

Archivist.—MRS. MARGARET C. BLAKER.

Scientific illustrator.—E. G. SCHUMACHER.

Administrative assistant.—MRS. JESSIE S. SHAW.

RIVER BASIN SURVEYS

Director.—FRANK H. H. ROBERTS, Jr.

Chief, Missouri Basin Project.—ROBERT L. STEPHENSON.

Archeologists.—LIONEL A. BROWN, WARREN W. CALDWELL, JOHN J. HOFFMAN, HAROLD A. HUSCHER, WILFRED M. HUSTED, RICHARD E. JENSEN, OSCAR L. MALLORY, CARL F. MILLER, ROBERT W. NEUMAN, G. HUBERT SMITH.

EIGHTIETH ANNUAL REPORT
OF THE
BUREAU OF AMERICAN ETHNOLOGY

FRANK H. H. ROBERTS, JR., *Director*

SIR: I have the honor to submit the following report on the field researches, office work, and other operations of the Bureau of American Ethnology during the fiscal year ended June 30, 1963, conducted in accordance with the act of Congress of April 10, 1928, as amended August 22, 1949, which directs the Bureau "to continue independently or in cooperation anthropological researches among the American Indians and the natives of lands under the jurisdiction or protection of the United States and the excavation and preservation of archeologic remains."

SYSTEMATIC RESEARCHES

Dr. Frank H. H. Roberts, Jr., director of the Bureau, devoted most of the fiscal year to office duties and to general supervision of the activities of the Bureau and the River Basin Surveys.

Early in August, at the invitation of the Czechoslovak Academy of Sciences, Dr. Henry B. Collins, anthropologist, attended a meeting of the Permanent Council of the International Congress of Anthropological and Ethnological Sciences in Prague. Following the meetings the delegates were taken on a week's tour to visit ethnographic museums and inspect paleolithic and neolithic sites being excavated by Czech archeologists in Bohemia, Moravia, and Slovakia.

On November 9-10 Dr. Collins participated in a symposium on Prehistoric Man in the New World held at Rice University, Houston, Tex., in celebration of the 50th anniversary of the university. His paper, discussing the present status and problems of archeological research in the American Arctic and subarctic, together with those of the 16 other participants in the symposium, will appear in a volume to be published by the University of Chicago Press. Dr. Collins's paper "Bering Strait to Greenland," evaluating the results of recent archeological discoveries in the American Arctic and their bearing on the problem of the origin and relationships of Eskimo culture, was published in December 1962 in *Technical Paper No. 11, Arctic Institute of North America*. Another paper, "Stefansson as an Anthropologist," was published in the Stefansson memorial issue of *Polar Notes, No. 4*.

In December Dr. Collins was reelected to a 3-year term on the board of governors of the Arctic Institute of North America. He continued

to serve as a member of the Institute's publications committee and as chairman of the directing committee which is responsible for preparation of the *Arctic Bibliography*, a reference work which summarizes and indexes the contents of scientific publications in all fields, and in all languages, pertaining to the Arctic and subarctic regions of the world. The material for Volume 11 of the bibliography, edited by Marie Tremaine, was delivered to the Government Printing Office in October 1962. Approximately 1,500 pages in size, it will contain abstracts in English of 6,607 publications, of which 2,990 are of books, monographs, and papers published in Russian, 2,638 in English, and 979 in Scandinavian, German, French, and other languages. American scientists and others interested in following the course of scientific research and economic and social developments in the northern parts of the Soviet Union find the bibliography a valuable source of information, including as it does English abstracts of Soviet publications on such widely varied subjects as acclimatization, acculturation, administration and government, aerial mapping and reconnaissance, agriculture, archeology, botany and zoology, construction, economic conditions, education, electric power, fishes and fisheries, forestry, geology and geophysics, hydrology, ice navigation, maps and mapping, meteorology, mineral resources, mines and mining, oceanography, paleontology, public health and medicine, petroleum, petrology, railroads, transportation, wildlife conservation and management, etc. Abstracts of anthropological publications have formed a substantial part of the *Arctic Bibliography* from the beginning of the project. An attempt has been made, with considerable success, to summarize and index the contents of every paper that has been written on the Eskimos of Siberia, Alaska, Canada, and Greenland; the Tlingit, Haida, and Tsimshian Indians of the Northwest Coast; the northern Athapaskans and Algonkians; and the native peoples of northern Eurasia.

The Arctic Institute's Russian translation project—*Anthropology of the North: Translations from Russian Sources*—which Dr. Collins organized in 1960, continued its operations under a renewed grant from the National Science Foundation and the editorship of Dr. Henry N. Michael. The third volume of the series, an English translation of the late M. G. Levin's definitive work on the anthropology of northeastern Asia (*Ethnic Origins of the Peoples of Northeastern Asia*), was published by the University of Toronto Press in May 1963. Additional translations of Russian publications on Arctic anthropology are in the course of preparation.

Dr. William C. Sturtevant attended the 35th International Congress of Americanists (Mexico City, August 19-25), the joint annual meetings of the American Indian Ethnohistoric Conference and the Conference on Iroquois Research (Albany, October 12-14), the 61st annual

meeting of the American Anthropological Association (Chicago, November 15-18), and the annual meeting of the Central States Anthropological Society (Detroit, May 16-18). At the last he participated in a symposium on primitive art.

Dr. Sturtevant's time in Washington was devoted to continuing research on the Iroquois and Seminole, to preparation of a paper titled "Studies in Ethnoscience" which he presented at the Social Science Research Council's Conference on Transcultural Studies of Cognitive Systems (Mérida, Yucatán, April 17-20), and to his duties as book-review editor of the *American Anthropologist*. Papers by him were published in the *Florida Anthropologist* and in *Ethnohistory*.

In July Dr. Sturtevant spent about 2 weeks continuing ethnographic fieldwork among the Seneca-Cayuga of Oklahoma, which he had begun the previous summer. This research, supported by a grant from the American Philosophical Society, is providing data on the most extreme variant of Iroquois culture, particularly on religion and ceremonial aspects, which casts a new light on the relatively well-known culture of the modern Iroquois communities in New York and Ontario. In October Dr. Sturtevant spent a few days on the Six Nations Reserve in Ontario, observing an important Iroquois religious ceremony and making inquiries for comparison with his Oklahoma data. In addition to this fieldwork, Dr. Sturtevant conducted archival research on the Oklahoma Seneca-Cayuga in the Indian Archives Division of the Oklahoma Historical Society in Oklahoma City (July 23-24) and museum research on Florida Seminole and other eastern Indian material in the Milwaukee Public Museum (November 19-21) and in the College Museum of Hampton Institute, Hampton, Va. (June 8-9).

In November Dr. Robert M. Laughlin, ethnologist, began fieldwork in Chiapas, Mexico, where he collected and recorded ethnographic and linguistic materials, particularly myths and dreams, as well as numerous prayers, from the Tzotzil Indians of Zinacantan, Chiapas, and surrounding areas. A vocabulary of 2,200 items of the dialect of Zinacantan collected by Lore M. Colby in 1960 has been expanded to 4,000 by Dr. Laughlin. He recorded a series of 26 dreams in Tzotil from a Zinacantan informant. Because specific dream experiences determine the selection of shamans from the community and also provoke new religious feasts, it is expected that dreams will illuminate many aspects of Zinacantan world view. This material is being prepared for publication.

Dr. Laughlin utilized the results of a week of ethnographic research in the Huastec area of the States of San Luis Potosí and Veracruz, Mexico, in January 1963, to supplement library research for the preparation of the chapter "Huastec" for the *Handbook of*

Middle American Indians. Another chapter for the *Handbook*, entitled "Tzotzil," is in preparation. Dr. Laughlin returned to Washington in mid-May to check on data he had obtained in the field and to consult references in various libraries, and on June 14 left again for Mexico to continue his field studies.

RIVER BASIN SURVEYS

The River Basin Surveys, the unit of the Bureau of American Ethnology organized to cooperate with the National Park Service and the Bureau of Reclamation of the Department of the Interior, the Corps of Engineers of the Department of the Army, and State and local institutions in the program for salvage archeology in areas to be flooded or otherwise destroyed by the construction of large dams, continued its activities. An increase in funds made possible an expansion of the program throughout the Missouri Basin. The investigations during 1962-63 were supported by a transfer of \$271,000 from the National Park Service, a carryover of \$64,498 Missouri Basin money, a grant of \$7,285 from the Appalachian Power Co., and a carryover of \$4,080 from an earlier contribution by the Idaho Power Co. The National Park Service funds were to support the investigations in the Missouri Basin, and the grant from the Appalachian Power Co. was to provide for archeological excavations along the Roanoke River in southern Virginia where the Smith Mountain Project is nearing completion. The balance from the Idaho Power Co. came from a grant originally made to conduct researches in the Hells Canyon Reservoir area along the Snake River, Idaho-Oregon, and the work this year was a continuation of that project. This particular investigation was carried on as a cooperative project between the River Basin Surveys and the Museum of Idaho State College at Pocatello. The grand total of funds available for the River Basin Surveys in 1962-63 was \$346,863.

Activities in the field pertained, in large part, to surveys and excavations. Most of the work was concentrated in the digging or testing of sites but surveys were made in six new reservoir basins. Five of the new reservoirs were in Kansas; the sixth was in Nebraska. At the beginning of the fiscal year, nine excavating parties were in the field in the Missouri Basin and one survey party was operating in Montana. In September, digging was started in the Smith Mountain Reservoir area in southern Virginia, and in October a small group collected pollen samples from areas in western Nebraska. During February and early March one party excavated a site along the Chattahoochee River in Georgia. In May, a small group worked for a short period in South Dakota, while another made the reconnaissance of the six reservoirs previously mentioned. Also during May a party

returned to the Smith Mountain area. During June, 11 parties began operations in the Missouri Basin and were fully occupied in the excavation program at the end of the fiscal year.

As of June 30, 1963, archeological surveys and excavations had been made, since the start of the salvage program, in a total of 264 reservoir areas located in 29 different States. Furthermore, two lock projects, four canal areas, and two watershed areas had also been examined. Since 1946, when the program got underway, 5,009 sites have been located and recorded; of that number, 1,175 were recommended for excavation or limited testing. Because of the conditions under which the salvage operations need to be conducted, complete excavations, except in the case of a few small sites, are rarely possible. Consequently, when the term "excavation" is used, it generally implies that only about 10 percent of a site was dug.

By the end of the year, 484 sites in 54 reservoir basins and one watershed area had either been tested or excavated to the degree where good information about them had been obtained. It has been the policy of the River Basin Surveys to dig in at least one example of the various kinds of sites reported in the preliminary surveys. The sites range in nature from those which were simple camping areas, occupied by early hunting and gathering Indians of about 10,000 years ago, to village remains left by historic Indians of the mid-19th century. In addition, the remains of frontier trading posts of European origin and of Army installations have also been examined. The results of the investigations have been incorporated in reports which have been published in various scientific journals, in the Bureau of American Ethnology Bulletins, and in the Miscellaneous Collections of the Smithsonian Institution. *River Basin Surveys Paper No. 25*, which constitutes *Bureau Bulletin 182*, pertaining to the work done in the John H. Kerr Reservoir Basin on the Roanoke River, Virginia-North Carolina, was published in October. *River Basin Surveys Papers Nos. 26-32*, which report on investigations in North Dakota, Montana, and Kansas, and comprise *Bulletin 185*, were released during June. Reports on other investigations in the two Dakotas and Kansas, consisting of *River Basin Surveys Papers 33-38*, constituting *Bulletin 189*, were sent to the Printing Office early in the fiscal year and will be ready for distribution shortly after the beginning of the new year. Various members of the staff cooperated with representatives of other Federal agencies in the preparation of short popular pamphlets about some of the major reservoir projects. These pamphlets were published by the cooperating agency and are distributed at the visitors' center for the reservoir concerned.

As in previous years, the River Basin Surveys received helpful cooperation from the National Park Service, the Bureau of Reclama-

tion, the Corps of Engineers, the Geological Survey, and numerous State and local institutions. The party leaders were assisted in many ways by the field personnel of all the cooperating agencies, and the relationship was excellent in all areas. The National Park Service continued to serve as liaison between the various agencies, both in Washington and in the field. The Park Service also prepared the budget estimates and justifications for the funds needed to support the salvage program.

General direction and supervision of the program were continued by the main office in Washington. Work in the Missouri Basin was directed by the field headquarters and laboratory at Lincoln, Nebr. The projects in southern Virginia and Georgia were supervised by the Washington office.

Washington Office.—Dr. Frank H. H. Roberts, Jr., continued the direction of the main headquarters of the River Basin Surveys in the Bureau of American Ethnology throughout the year. Harold A. Huscher and Carl F. Miller, archeologists, were based at that office. Mr. Huscher had just returned from the Walter F. George Dam and Lock area on the Chattahoochee River below Columbus, Ga., at the beginning of the fiscal year. He remained in the office during the summer and fall months, working on the accumulating records and collections from the 4 preceding years. In November he attended the Southeastern Archeological Conference and the Conference on Historic Site Archeology at Mound State Park, Moundville, Ala., reading a report on the "Archaic of the Walter F. George Reservoir Area." On November 10 and 11, he attended the Eastern States Archeological Conference at Athens, Ga., reading a paper on "Generic Western Names Identifiable in the Southeast." On November 22-24, he participated in the 20th Annual Plains Conference at Lincoln, Nebr., where he discussed "Southern Athapaskan Names in Early Spanish Records." Early in February he returned to Georgia and completed emergency excavations at a site just south of the City of Columbus. In May he attended the joint meeting of the Society for American Archeology and the American Association of Physical Anthropologists at Boulder, Colo., reading a paper on "Intermontane Athapaskan Continuities." At the close of the fiscal year he was working on his materials from the Walter F. George Reservoir area.

At the beginning of the fiscal year Mr. Miller was in charge of an excavating party at the Tuttle Creek Reservoir area in northern Kansas. The results of his activities there are covered in the following section on the Missouri Basin. On September 10 he left for the Smith Mountain and Leesville Reservoir area in southern Virginia and carried on excavations there until November 18, when weather conditions made it advisable to terminate digging until spring.

While in the Washington office he worked on materials he had previously collected in Georgia and also started detailed studies on the ceramic material he had obtained while digging at Russell Cave in Alabama. He also examined numerous archeological specimens sent to the Washington office by private collectors. In January he assisted in setting up a series of archeological exhibits at one of the schools in Newport News, Va. He also completed two short papers for publication, one describing certain polyhedral cores found in Kansas, the other discussing *Chenopodium* weeds as a source of food for Southeastern Indians. On May 15, Mr. Miller left Washington for Rocky Mount, Va., to resume his investigations in the Smith Mountain Reservoir Project area, and at the end of the year he and his small field party were digging in one of the best sites found in that locality.

Alabama-Georgia.—Harold A. Huscher spent the week of November 4–10 at the Walter F. George Reservoir, checking and photographing sites as they were being progressively flooded by the rising waters of the reservoir. At the upper end of the reservoir the historically important Coweta Town House site, 1 RU 9, where Oglethorpe held a peace conference with the Creek chiefs in 1739, was being destroyed by grading for the new Phoenix City dock development.

The Walker Street site (Key School site), 9 ME 60, reported by David W. Chase, Fort Benning Infantry Museum, was being destroyed by an eroding drainage ditch and immediate salvage operations were recommended. Huscher returned to Georgia on February 7, 1963, and, working under an emergency grant, investigated this site, which proved to be an Early Woodland occupation level buried in a natural levee of the Chattahoochee River south of Columbus. With the assistance of David W. Chase of the Infantry Museum, power equipment was used in stripping the overburden from 1,600 square feet of the site. The exposed camp layers were then excavated using power-screening techniques. Post holes in linear and curvilinear arrangements were recorded, but no complete house patterns were worked out. Twenty occupational features, including pits and hearths, were recorded. Over 3,000 sherds and stone artifacts were recovered, of which 1,000 were sherds of the sand-tempered fine-checked (Cartersville Check Stamped) types. There were 40 examples of the tetrapodal pot-base and 9 examples of the subrectangular flat pot-base, characteristic of the late Deptford Period. Minority pottery types were, in descending frequency, large check stamped, complicated stamped, linear check stamped, and simple stamped. A few sherds showed combinations of check stamped and complicated stamped, possibly transitional Deptford-Swift Creek forms belonging with Willey's New River Complicated Stamped. The characteristic

point is triangular, thick cross-section, slightly excurvate sides, with baseline either straight, slightly concave, or slightly convex. The assemblage, seemingly a manifestation late in the Deptford Period, with some early traits of the Swift Creek complex appearing, most closely parallels that found in the submound and primary mounds at the Stark's Clay Landing site, 9 CLA 1 ("Mandeville Mound," University of Georgia), and the Mound at the Upper Francis Landing, 1 BR 15 ("Shorter Site," University of Alabama), and the Early Woodland level at the Russell Cave.

Idaho-Oregon.—Under an agreement with the Smithsonian Institution, the Idaho State University Museum undertook archeological reconnaissance and excavations in the Hells Canyon Reservoir on the Snake River between Idaho and Oregon. Fieldwork began on March 25, 1963, and concluded June 20, 1963. The project was under the general supervision of Dr. Earl H. Swanson, director of the museum. Max G. Pavesic, a graduate student at the University of Colorado, directed the fieldwork and was assisted by Roger Nance, Washington State University, and by David Wyatt, University of Washington.

Field headquarters were maintained at Oxbow Dam, where the Idaho Power Co. generously made available a trailer for residence and for laboratory work. Additional assistance during the excavation was given by the Morrison-Knudsen Corp., which provided the field party with a bulldozer. Grateful acknowledgment is also due to Jess Smith, Mr. and Mrs. Amos Camp, Dan Cole, Ross Parker, Ralph Page, and Rudy Lanning for the help they gave.

The field studies were conducted throughout by three men whose work included intensive reconnaissance and excavation at an important village site (No. 10-AM-1). Ten archeological sites were located which were not reported in the original survey of Hells Canyon (Columbia Basin Project, River Basin Surveys, Smithsonian Institution, 1951). These include three rockshelters, seven camp sites, and numerous rock cairns. Five cairns were excavated. The first was excavated entirely by hand because these appear to be a type of archeological feature. Cairns of this nature are constructed of large boulders, which sometimes weigh several tons and which are covered by earth. Reports of burials beneath the cairns were given to the crew, but no archeological materials or data were obtained from them and they remain unexplained at this time.

An important village site was given careful attention by the field party. Two adjacent housepits, as well as the area between, were intensively examined by excavation. These lie on a north-south axis parallel to the river. The largest structure is approximately 25 feet in diameter, while the smaller measures approximately 12 feet across.

It could not be determined whether there was any superimposition of the structures. Stratigraphically, and by the artifact inventory, the housepits appear to be contemporaneous. In both, the house fill is not more than 3½ feet in depth. Little soil change was found in the fill, which was a dark loam near the top but became sandier with depth. Above the sterile soil, yellow sand and gravel, an ash layer is found throughout the limits of the housepits. Stratigraphically, there appears to be only one cultural occupation.

Large quantities of tools, flakes, and bones were recovered, which indicate both intensive occupation and use of the area for hunting purposes. Preliminary examination of the artifacts suggests that occupation was late in prehistoric time, possibly early historic, and similarities can be seen with the Camas Prairie Phase reported at the Weis Rockshelter on Camas Prairie (B. Robert Butler, Contributions to the Prehistory of the Columbia Plateau, *Occasional Papers No. 9* of the Idaho College Museum).

Missouri Basin.—At the beginning of fiscal year 1947 the Missouri Basin Project of the River Basin Surveys began its operations from the field headquarters and laboratory in Lincoln, Nebr. The Project has carried on its activities for 17 consecutive years from that location. The office and laboratory were at first housed with the Laboratory of Anthropology in the basement of the Social Sciences Building. They were then moved to a basement hallway of the University of Nebraska Library. Shortly thereafter much more space was made available in the basement of the just-completed Burnett Hall on the University campus, and the Laboratory of Anthropology and the project again joined forces. By 1950, both the project and the Laboratory of Anthropology had outgrown this space, and the Missouri Basin Project rented a building at 1517 O Street. The project laboratory was transferred to the new location, but offices were maintained in Burnett Hall. In 1953 the offices were moved to O Street and the entire project operated from that location for the following 10 years. During the present fiscal year expansion of the project and deterioration of the upper floors of the building at 1517 O Street made new quarters an absolute necessity. On May 1, 1963, the Missouri Basin Project rented a one-story building at 1835 P Street in Lincoln and moved to that location. It is a relatively new, fireproof building of 14,000 square feet, with all laboratory, storage, and office facilities on one floor.

Activities during the current fiscal year, as in past years, included surveys, excavations, analyses of materials, and reporting of results of the salvage of archeological remains being destroyed by dam and reservoir construction within the Missouri Basin. Dr. Robert L. Stephenson served as chief of the project, except for approximately 3 months when he was on leave and Dr. Warren W. Caldwell func-

tioned as acting chief. During the summer months the work consisted mainly of excavations. Analyses and preparation of reports received the major attention throughout the remainder of the year. The special chronology program, begun in January 1958, was continued throughout fiscal 1963.

At the beginning of the year the permanent staff, in addition to the chief, consisted of five archeologists, one administrative clerk, one administrative assistant, one secretary, one clerk-typist, one scientific illustrator, one photographer, and four museum aides. The temporary staff included 4 archeologists, 5 field assistants, 3 cooks, and 83 field crewmen.

During July and August seven field crewmen were added to the temporary staff. By the end of the first week in August, the employment of all the field crewmen and cooks had been terminated. Other terminations of temporary employees were made shortly thereafter. Four of the temporary archeologists and field assistants were transferred to the permanent staff as archeologists.

At the end of the fiscal year the permanent staff consisted of 21 persons. These were, in addition to the chief, nine archeologists, one administrative assistant, one secretary, one administrative clerk, two clerk-typists, one scientific illustrator, one photographer, and four museum aides. The temporary staff consisted of 71 persons: 3 archeologists, 2 physical anthropologists, 4 cooks, and 62 field crewmen.

During the year there were 25 Smithsonian Institution River Basin Surveys field parties at work in the Missouri Basin. During July and August four parties were working in the Oahe Reservoir area and four parties were working in the Big Bend Reservoir area of South Dakota; two parties were working in the Yellowtail Reservoir area of Montana and Wyoming; one crew was working in the Tuttle Creek Reservoir area in Kansas; and one party was surveying the Missouri Breaks area between Fort Peck and Fort Benton in Montana. In October a small crew was collecting pollen samples in western Nebraska. In May, a small crew worked in the Fort Randall Reservoir area of South Dakota and a survey party conducted a reconnaissance of six proposed reservoirs in Kansas and Nebraska. During June, a crew was excavating in the Pony Creek area of Iowa; another crew had begun work on the James Diversion Project in South Dakota; one crew was at work in the Yellowtail Reservoir of Montana and Wyoming; three parties were working in the Oahe Reservoir; and four groups were excavating in the Big Bend Reservoir, South Dakota. One special crew was not in the field but was at work during June in the laboratory at Lawrence, Kans., studying the skeletal remains from sites in the Oahe Reservoir.



Walker Street site (Key School site), 9ME60, a buried Deptford camp on the Chattahoochee River, Ga. Overburden has been removed and the underlying camp levels are being excavated by units 10 feet square. River Basin Surveys.



Probable house pattern showing at bottom of Deptford level. Shown here are indications of a subrectangular structure with supporting wall posts set in trenches. River Basin Surveys.



Close-up view of the Sorenson site (24CB202) in the Big Horn Canyon within the Yellowtail Reservoir area during excavation. Evidence of more than 7,000 years of occupation were uncovered in this small rock shelter. River Basin Surveys.



View of the site (24CB203) at the confluence of Dry Head Creek with the Big Horn River within the Yellowtail Reservoir area. Smithsonian Institution field camp can be seen adjacent to the excavation area. River Basin Surveys.

Other fieldwork in the Missouri Basin during the year included 14 parties from State institutions operating under cooperative agreements with the National Park Service and in cooperation with the Smithsonian Institution in the Inter-Agency Archeological Salvage Program.

At the beginning of the year Robert W. Neuman, assisted by John J. Hoffman and a crew of 10, was at work on the excavation of an early village of circular houses known as the Molstad site (39DW234),¹ about 8 miles south of Mobridge, S. Dak., on the right bank of the Missouri River in Dewey County. This site will be subject to wave cutting at maximum pool level of the Oahe Reservoir. Artifacts and architectural details recovered indicate that the site had been a small, fortified village of the very early period of circular house occupation often referred to as the La Roche. There were five houses within an oval stockade and one larger house outside the stockade. The stockade was surrounded by a dry moat 2.6 feet deep and had a single large loop bastion on one side. The entire stockade line and five of the houses were excavated, as well as the bastion and two cross sections of the moat. The people who occupied this site during the 15th or 16th centuries were culturally very closely related to those who occupied the Potts Village, some 2 miles upstream, which had been excavated previously by crews from the Missouri Basin Project.

A second field party in the Oahe Reservoir, also directed by Robert W. Neuman with the assistance of James J. Stanek and a crew of 10, was at work at the beginning of the year excavating the Swift Bird site (39DW233), half a mile downstream from the Molstad site. This site comprised a group of two burial mounds of the Plains Woodland Period and a circular house depression that appears to belong to the La Roche Period. The burial mounds date from a period of some 1,500 or so years ago, while the house dates from about 500 years ago. Mound 1 was a dome-shaped tumulus 75 feet in diameter and 4 feet high. Several articulated bison skeletons lay on the mound floor as did numerous large, charred timbers. Below these was a burial pit containing several secondary human interments. Artifacts were few and largely found within the burial pit. In most respects this mound resembled those excavated at the Boundary Mounds site at the North Dakota-South Dakota State line. Mound 2 was slightly smaller and had articulated bison skeletons, secondary

¹ Site designations used by the River Basin Surveys are trinomial in character, consisting of symbols for State, county, and site. The State is indicated by the first number, according to the numerical position of the State name in an alphabetical list of the United States; thus, for example, 32 indicates North Dakota, 39 indicates South Dakota. Counties are designated by a two-letter abbreviation; for example, ME for Mercer County, MN for Mountrail County, etc. The final number refers to the specific site within the indicated State and county.

human burials, and a very few artifacts on the mound floor, but no burial pit. The circular house provided a minimal floor pattern without center posts and a small quantity of artifacts. This party also excavated Mound 3 of a series of five burial mounds at the Grover Hand site (39DW240). That mound resembled Mound 1 at the Swift Bird site, including the burial pit. Remains of 17 bison were recovered from the mound fill and floor. A new site, the Stelzer (39DW242), was tested. It is situated about a mile downstream from 39DW240. Occupational levels and artifacts indicate that this may be a substantial camp site of Plains Woodland times. Neuman's two crews shared a single camp and completed their fieldwork on September 2 after 12 weeks in the field.

A third field crew in the Oahe Reservoir was directed by Dr. William M. Bass, assisted by Jon Muller and a crew of six. Based in Pierre, this party utilized a caterpillar tractor and scraper to excavate large sections of the burial areas at the Sully site (39SL4), which is located approximately 20 miles northwest of Pierre, on the left bank of the Missouri River. It comprises the largest prehistoric village remains in the Missouri Basin and was excavated in previous years by Smithsonian Institution field crews. The large burial areas were not exhausted and, in order to get a sufficiently large sample of the physical remains of the people who had lived there some 250-400 years ago, the current season's work was directed toward exhausting the burial areas. The heavy equipment was used to remove the overburden above the graves. Each grave was then excavated by hand. During the first three seasons of work, 264 burials were excavated. This season an additional 293 were recovered, making a total of 557 burials from this one village. Brief investigations at other sites provided additional burials. At the Swan Creek site (39PO1), excavated during a previous season by a cooperating institution, a single burial was obtained. At the Bleached Bone site (39HU48), 20 burials were recovered and 8 were taken from the Second Hand site (39PO207). In addition, a good quantity of burial artifacts was recovered, correlating the burials directly with the village areas and providing cultural meaning for the skeletal remains. This party completed its fieldwork on August 30 after a season of 12 weeks.

The fourth Oahe Reservoir party was directed by Dr. Alfred W. Bowers, assisted by William B. Colvin and a crew of 10. Based at Mobridge, S. Dak., this crew excavated 14 circular earth lodges in the Red Horse site (39CO34) just west of the bridge from Mobridge and at the mouth of the Grand River. This was a moderately large, fortified earth-lodge village of the late period and probably dates in the 18th century. A large artifact yield as well as good architectural details resulted from the excavations. Bowers's crew also exca-

vated a portion of the Davis site (39CO14), some 200 yards west of the Red Horse site. There, a complex defensive system and a series of long rectangular houses were partly uncovered. Apparently there were at least two, and perhaps three, occupation periods represented, but time did not permit sufficient excavation to recover the whole story. The earliest occupation of the Davis site was several centuries earlier than that at the Red Horse site. Continuation of the work was planned for the next season.

In the Big Bend Reservoir area, three field parties were at work at the beginning of the year and a fourth party was added during July. One of the parties was directed by Dr. Warren W. Caldwell, assisted by Richard E. Jensen and a crew of 11. They excavated at two sites. The Langdeau site (39LM209) had been a village of long-rectangular houses and 15 depressions were visible. Four of these house remains were excavated, and three long trenches were dug in an unsuccessful attempt to find a fortification system. The houses were 30-40 feet wide with no small structural posts at the ends. Entrances were to the south or southwest and floors were compact and stained with red ochre. Pottery found there is of the Anderson and Foreman types, suggesting relationship to the early rectangular-house period at the Dodd site near Pierre, but other artifacts were extremely exotic, including copper, shell, bone, and stone tools and ornaments. This crew's second excavation was at the Jiggs Thompson site (39LM208), located 9 miles north of Lower Brule in the loop of the Big Bend. This site had been a small village of 17 long-rectangular houses situated on a high terrace finger that was separated from the rest of the terrace by a moat 4.5 feet deep and 11 feet wide. Two houses were excavated, the moat was sampled, and numerous other test trenches were dug. The houses had been about 30 by 20 feet with entrances to the south. They did not have end posts, but there were massive central support posts. Architecture and artifacts suggest a close relationship to the Langdeau site; both are in the Anderson-Foreman and Swanson traditions of early rectangular-house culture. This party completed its work on August 26 after 11 weeks in the field.

The second Big Bend party was also directed by Dr. Caldwell, with the assistance of Richard E. Carter. It consisted of a crew of nine. Excavations were carried out at a two-component site (39LM2) overlooking Medicine Creek some 8 miles northwest of Lower Brule. This had been a village of small, rectangular houses with ramp entrances to the south, minimal end support posts, and many cache pits. The remains of the first occupation were overlain by those of a village of square (or subrectangular) houses, 35 feet in diameter, which had four central support posts of the kind usually found in

late circular houses in the area. One house of each component, many cache pits, and several midden areas were excavated. Abundant pottery and other artifacts suggest that the earlier component relates to the Anderson and Over foci, while the later component was of the period of the Shannon Focus and similar to component C at the Talking Crow site. This party also sampled the Jandreau site (39LM221), 3 miles east of Medicine Creek in the same general area. Portions of two long-rectangular houses were excavated as were cross sections of the fortification moat. Ceramics recovered there suggest that the village may have been transitional between the Anderson Focus and the Thomas Riggs Focus and will date toward the latter part of the long-rectangular house period. In addition, minor tests were made at the Gilman site (39LM226) and at site 39LM228 in the Medicine Creek Bottoms. The latter proved to have been a rectangular-house village of Over Focus affiliation, while the former was a circular-house village of the Shannon Focus. After 11 weeks in the field this crew completed its assignment on August 26.

A third party in the Big Bend Reservoir area, sharing a joint camp with Caldwell's two crews, was directed by Vernon R. Helmen. This crew of three was frequently assisted by members of Caldwell's parties during the 2 weeks of its work (July 16-27). Helmen and his associates provided their services on a volunteer basis, and Mrs. Helmen made a useful study of the microecology of the flora of one earth lodge. The Helmen crew excavated one house in site 39LM223, a small village of the Shannon Focus. The circular house and several cache pits yielded Talking Crow and Iona pottery.

The remaining field party in the Big Bend Reservoir area was at work at the beginning of the year excavating the remains of Fort George (39ST202), a historic fur-trading post built in 1842 and operated briefly in opposition to the trading post of Fort Pierre Chouteau. The crew of eight was directed by G. Hubert Smith, assisted by Lee G. Madison, and was based in Pierre with the Bass party. Fort George was located on the right bank of the Missouri River some 15 miles downstream from Pierre. Remains of the log stockade, two blockhouses, and the interior buildings of timber were excavated and recorded. Artifacts were abundant and will, along with the architecture, provide a substantial picture of life at this early post, of which so little contemporary record remains.

Two Missouri Basin Project field parties were at work at the beginning of the year in the Yellowtail Reservoir area in the Big Horn Canyon in Montana and Wyoming. Lionel A. Brown, with a crew of five, operated in the lower end of the reservoir from the Yellowtail Dam south to the mouth of Dry Head Creek, a distance of some 25 miles upstream from the dam. They excavated three large, dif-

fuse, occupation sites and tested numerous rock shelters. Site 24BH215 at the mouth of Black Canyon, 6 miles above the dam, was a stratified campsite with three levels of occupation. Artifacts were moderately abundant and included a few nondescript potsherds, corner-notched projectile points, and many scrapers, blades, and bone tools, but no evidence of structures. It appears to have been a camp intermittently occupied from a few hundred years ago to historic times. Site 24BH212 was a complex of occupations at the mouth of Bull Elk Canyon 18 miles above the dam. It contained six stone circles, two circles of shallow postholes, midden deposits, fireplaces, a profusion of scrapers and other small stone tools but very few projectile points and no evidence of pottery. Five of the stone circles contained semicompacted floors, floor debris, and a central fireplace, and one had a midden deposit just outside the stone circle all emphasizing the fact that they served the function of actual tipi rings. The circular arrangements of shallow postholes with a suggestion of floors indicate structures of temporary pole construction. Occupation was shallow with only one level apparent except in one small section of the site where three levels were apparent. Artifacts are not very diagnostic but probably represent a period of three or four centuries before White contact. The third major site excavated by Brown's crew was located on the opposite (left) bank of the Big Horn River at the mouth of Dry Head Creek some 25 miles above the dam. There, four levels of occupation produced large quantities of bison, deer, and elk bone, numerous small stone artifacts, an elk bone flesher, numerous fire pits, and basin-shaped pits but neither pottery nor structures. Several rock shelters between Black Canyon and Dry Head were investigated and tested but none proved to contain worthwhile occupational materials. This party returned to the Lincoln headquarters August 31 after 11 weeks in the field.

Wilfred M. Husted was in charge of the second Yellowtail field party excavating a series of sites in the upper reaches of the reservoir. Working from various campsites between the village of Kane at the extreme southern end of the reservoir to Barry's Landing, some 20 miles to the north, this crew used boat, Jeep, carryall, and foot transportation to resurvey this portion of the Big Horn Canyon and excavate five sites. A rock shelter (48BH206) was sampled but not completed owing to difficulty of access. A large tipi ring site (48BH10) with 20 stone circles, on the left bank of Crooked Creek, was excavated. Five of the circles were dug and three of them contained central fireplaces as well as exterior fireplaces. One open campsite (48BH211) and several rock shelters were examined and tested but provided no useful archeological data. On the Wyoming side of the reservoir, a site at Barry's Landing (24CB201) was exca-

vated. It had superimposed hearths and roasting pits and numerous projectile points and scrapers. The artifacts represent the latter part of the Middle Prehistoric Period overlain by an occupation of the Late Prehistoric Period. A nearby rock shelter (24CB223) was excavated and furnished similar material. The Sorenson site (24CB202), half a mile below Barry's Landing, was completely excavated with excellent results. Five levels of occupation extending from historic times back to the pre-Middle Prehistoric Period were delineated. Lanceolate projectile points in the lowest level (dated at 7,500-7,800 years ago) were overlain by materials of the Middle and Late Prehistoric Period and capped by a historic occupation. Materials included cordage, basketry, hide, bone tools, stone tools, roasting pits, and hearths. In the resurvey of this section of the canyon, 21 new sites were located, of which 18 will be flooded. Husted's party completed the season's work August 30 after 11 weeks in the field.

A survey party directed by Oscar L. Mallory, consisting of a crew of three, made a detailed reconnaissance of the Missouri Breaks along the Missouri River from Fort Benton to the upper reaches of the Fort Peck Reservoir. Beginning at the Fort Benton end of the Breaks, this party utilized boats, horses, vehicles, and foot transportation to locate 55 archeological sites within this 180-mile stretch of extremely rugged river country. Of these sites, 20 were campsites, 21 were campsites with tipi rings, 2 were burials, 3 were bison-kill sites, and 9 were historic sites. Surface collections were made from most of these and two were tested. Artifact yield was minimal but enough to suggest a fairly long period of occupation and significant excavation potential in the area.

The final Missouri Basin Project field party at work at the beginning of the year was directed by Carl F. Miller who, with a crew of nine, was at work in the Tuttle Creek Reservoir of northeastern Kansas. With headquarters in the town of Blue Rapids, Kans., this party investigated seven sites in the upper reaches of the reservoir and excavated one. This was the last chance to examine any of the threatened sites in this reservoir, as the water was already rising, and by the summer of 1963 any sites that were to be flooded would have been submerged. The Pishney site (39MH2) received the attention of Miller's party most of the season and provided a single house structure, a portion of a second house, several cache pits, and a substantial yield of artifacts. The houses at this site were square with rounded corners and the artifacts suggest a cultural position within the Central Plains Phase but with definite indications of influences from the south. Miller's party left the field on August 16 after working for a period of 9 weeks.

Cooperating institutions active in the Missouri Basin at the beginning of the fiscal year included six field parties representing five State agencies in Nebraska, Kansas, Missouri, and Montana. Dr. Dee C. Taylor with a crew from Montana State University conducted a survey of portions of the shoreline of the Fort Peck Reservoir in east-central Montana, locating archeological sites that have been exposed by bank erosion along the shores of the reservoir. Marvin F. Kivett, assisted by Dr. Roger T. Grange with a crew from the Nebraska State Historical Society, completed salvage excavations in the area of the Red Willow Reservoir in southwestern Nebraska. Dr. Preston Holder, assisted by Dr. Emily Blasingham and a crew of University of Nebraska students, completed excavation and testing of sites to be flooded in the Norton Reservoir area of northwestern Kansas. Dr. Carlyle S. Smith, assisted by Walter Birkby and a crew of students from the University of Kansas, excavated two sites, sampled several others, and completed salvage work in the Melvern Reservoir area of east-central Kansas. Dr. Carl Chapman and a crew from the University of Missouri continued the surveying and testing of sites in the Kaysinger Bluff Reservoir area in west-central Missouri. A second crew tested a large series of sites in the Stockton Reservoir area of central Missouri. All these parties operated under agreements with the National Park Service and in cooperation with the Smithsonian Institution in the Inter-Agency Archeological Salvage Program.

The 1963 field season began with an archeological survey team under Lionel A. Brown, assisted by Lee G. Madison and Stephen H. Schwartz. This team began operations on May 6 and completed its work on May 29. It investigated the proposed area of the Almena Reservoir on Prairie Dog Creek, in northwestern Kansas, finding no archeological sites but recording one paleontological locality. The members of the party next went to the proposed area of the Herndon Reservoir on Beaver Creek in Rawlins County, Kans., where they recorded one archeological site. In Ellis County, Kans., on Big Creek, the proposed Ellis Reservoir was surveyed and two sites were recorded. The proposed area of the Fort Scott Reservoir in Bourbon County, Kans., was next surveyed and six sites were located. The next survey, made in Anderson County, Kans., found seven sites at the location of the proposed Garnett Reservoir. The final reservoir of the six surveyed was the Angus Reservoir in Nuckols County, Nebr., where two archeological sites were recorded. A total of 18 archeological sites and 1 paleontological locality were recorded in 6 reservoir areas.

On May 13 and 14, G. Hubert Smith and Oscar L. Mallory conducted a brief investigation of the site of the Fort Randall Military Post, near the Fort Randall dam in southeastern South Dakota. As an aid to the U.S. Corps of Engineers in developing this for public

use, Smith and Mallory pinpointed the significant cultural features and made recommendations for their development.

On June 7 the Pony Creek field party began work in that part of Mills County, southwestern Iowa, where the Soil Conservation Service is constructing several very small reservoirs and terracing most of the adjacent valley area. Headquartered in the town of Glenwood, this party of eight, directed by Lionel A. Brown, had by the end of the year visited and tested six sites (three of which had not previously been recorded) and begun excavations in sites 13ML4 and 13ML18, both of which appear to be villages of rectangular (or square) houses of the Nebraska Aspect.

On June 6 Dr. Elden Johnson of the University of Minnesota joined the staff of the Missouri Basin Project and spent 4 days in a brief investigation of the area of the James Diversion Project for detailed survey and excavation early in the next fiscal year.

The single field party in the Yellowtail Reservoir area of Montana and Wyoming, directed by Wilfred M. Husted, consisted of a crew of seven which left Lincoln on June 11. This crew started in the upper reaches of the reservoir where Husted's party left off the previous season. By the end of the year they had completed excavation of a small rock shelter and were continuing investigations on downstream.

In the Oahe Reservoir area of central South Dakota, three field parties were operating at the end of the year. Robert W. Neuman, in charge of a crew of eight, began work on June 11 at the Grover Hand site (39DW240), a group of Woodland burial mounds on the right bank of the Missouri River some 9 miles below Mobridge. By the end of the year, Mound 1 at this site had been excavated. This mound contained a burial pit covered with timbers. Bison skeletons were found on the mound floor.

The second Oahe party was directed by Oscar L. Mallory. With a crew of eight he began work on June 11 at site 39DW231, a presumed village or camp occupation site of the Plains Woodland Period that may be related to some of the burial mounds being dug by the Neuman party. The site is situated some 11 miles below Mobridge on the right bank of the Missouri River. Both the Neuman and Mallory crews camped at the Molstad ranch about a mile above the Grover Hand site, and both crews utilized 16-foot motorboats with 10-horsepower motors as their main means of transportation. This was necessitated by the high water of the Oahe Reservoir and the lack of roads in the area south of the Molstad ranch.

The third Oahe party also began work on June 11 under the direction of Dr. Alfred W. Bowers, who again joined the Missouri Basin Project staff for the summer, taking leave from his regular position at the University of Idaho. Dr. Bowers' crew of 10 camped at the east

edge of Mobridge and started digging on the Davis site (39CO14) at the west end of the Mobridge bridge. They had begun there the previous season and by the end of the year were well along with the excavations. They had also dug the last unexcavated lodge at the adjacent Red Horse site (39CO34) that Bowers's crew excavated in the 1962 season.

One historic-sites party was in the field at the end of the year, having begun work on June 14. This party, directed by G. Hubert Smith, was searching for some of the more obscure historic sites in the Big Bend Reservoir area, such as Loisel's Trading Post, Fort Defiance-Bouis, and the Red Cloud Agency. If they find any of these sites they will begin a program of excavations. By the end of the year Smith had devoted considerable time to searching records in various historical files both in Pierre and at Fort Pierre.

Three crews excavating prehistoric sites in the Big Bend area also began work on June 14. John J. Hoffman and a crew of 11 were at work at the end of the year on the series of sites, in the southeast corner of Lyman County on the right bank of the Missouri some 20 miles below Pierre, known as the "La Roche Sites." There, each of several sites has been called "La Roche" and much interpretation has been based on a concept of "La Roche." Hoffman's party was to excavate each of the sites and endeavor to identify some one element as La Roche and correlate the others with it. By the end of the year excavations were well under way in 39ST9, the site which W. H. Over many years ago designated as La Roche.

The second Big Bend field party was directed by William J. Folan, who joined the Smithsonian Institution staff, for the summer season, from Southern Illinois University. This crew of eight camped with the Hoffman crew and was directing its attention to the same problem. The two crews started together on the same site so that they would begin with the same orientation. By the end of the year Folan's crew was ready to move its operations to one of the other related sites in the area. All the sites appear to represent villages of late circular houses, or at least have one component of this "La Roche" trait.

The third Big Bend field party was directed by Richard E. Jensen. It consisted of a crew of 11 and was camped on the left bank of the Missouri in the "pocket" of the Big Bend, some 40 miles by road below Pierre. It was to conduct excavations in a series of circular-house villages nearby. By the end of the year progress had been made in work on the remains of an extensive, diffuse village, 39HU213. Widespread test trenching and the excavation of cache pits, middens, and a multiple burial had been completed.

Dr. William M. Bass of the University of Kansas, and an assistant, Walter Birkby of the same institution, joined the Missouri Basin

Project staff for the summer as temporary employees, in order to conduct laboratory research. Dr. Bass and his assistant analyzed a large quantity of skeletal material, excavated over the past several years by Dr. Bass, from several Missouri Basin sites in the Oahe Reservoir. Principal of these was the Sully site (39SL4) where 557 burials have been recovered. Bass and Birkby were working in the new laboratory facilities at the University of Kansas in Lawrence.

Cooperating institutions in the Missouri Basin at the end of the year included eight parties operating in five States. Dr. Dee C. Taylor and a Montana State University crew were continuing the shoreline survey of the Fort Peck Reservoir in east-central Montana, searching for and testing sites that had been exposed by bank erosion. Robert Gant and a University of South Dakota party were continuing a shoreline survey of the Gavins Point Reservoir in southeastern South Dakota, searching for and testing sites that had been exposed by bank erosion. Particular emphasis was being placed on the search for Plains Woodland and earlier sites. Both of these parties were continuing work begun the previous season. Dr. Preston Holder, assisted by James Marshall and a crew of University of Nebraska students, was excavating the Glen Elder site in the Glen Elder Reservoir in Mitchell County, north-central Kansas, and was searching for and testing additional sites within that reservoir. Dr. Carlyle S. Smith, assisted by Jon Muller and a party of Kansas University students, began the survey and testing of sites in the area to be flooded by the Milford Reservoir in Clay County, north-central Kansas. Dr. Carl Chapman had three University of Missouri parties at work at the end of the year. One was a survey group locating and testing sites in the area to be flooded by the Hackleman Corners Reservoir in southwestern Missouri. A second party was excavating sites in the Kay-singer Bluff Reservoir in west-central Missouri. The third party was digging sites in the Stockton Reservoir of west-central Missouri. Both of the latter were continuing work begun the previous season. Marvin F. Kivett, assisted by Dr. Roger T. Grange, Jr., and a Nebraska State Historical Society crew, surveyed two small reservoirs, Calamus and Davis Creek, in central Nebraska. Both surveys located only a few sites of doubtful archeological potential and it was recommended that no further work be done there unless material is uncovered during earth-moving operations for the construction of the two dams.

The Missouri Basin Chronology Program had been in operation for $5\frac{1}{2}$ years by the end of the year. Cooperation of nearly all the archeologists and archeological institutions in the Plains area continued as in previous years, and leadership and direction of the program continued to be by the staff archeologists of the Missouri Basin Project.

In October a Missouri Basin Project team composed of J. J. Hoffman and Lee G. Madison joined Dr. Paul Sears of Yale University, Dr. J. G. Ogden of Ohio Wesleyan University, and Dr. Harry A. Tourtelot of the U.S. Geological Survey in a trip to collect fossil pollen cores in the sandhills of northwestern Nebraska. The field trip was a part of the chronology program and a part of a continuing program of palynology designed to reconstruct prehistoric floral conditions for a portion of the Missouri Basin. Cores were collected at several of the fossil lakes in the area and will be analyzed by Dr. Ogden.

Other chronology studies included a continuation of the dendrochronology section under the direction of Dr. Warren W. Caldwell, with the volunteer assistance of Harry E. Weakly. The carbon-14 section continued to progress with the addition of 16 new dated samples of vegetal material, tested by the laboratory of Isotopes, Inc., of Westwood, N.J. Robert W. Neuman continued to be in charge of this section of the program and submitted several samples for dating to the new carbon-14 laboratory at the Smithsonian Institution in Washington, D.C. In addition, two samples were sent to the University of Texas for analysis in its carbon-14 laboratory.

The laboratory and office staff of the Missouri Basin Project devoted most of its full effort during the year to processing specimen materials for study, photographing and illustrating specimens, preparing specimen records, and typing, filing, and illustrating record and manuscript materials. The accomplishments of the laboratory and office staff are listed in tables 1 and 2.

Dr. Robert L. Stephenson, chief, devoted a large part of his time during the year to management of the overall Missouri Basin Project, including the office and laboratory in Lincoln, the several field activities, and the preparation of plans and budgets. His individual archeological research and report writing was minimal during the year, but some further progress was made on the monograph "The Whitney Reservoir, Texas" and on analyses of specimens from his excavations at the Sully site (39SL4) in the Oahe Reservoir. He made final revisions on his manuscript "The Accokeek Creek Site: A Middle Atlantic Seaboard Culture Sequence" and submitted it to the University of Michigan for publication. He also revised a paper he read at the 1962 meeting of the Society for American Archeology, entitled "Administrative Problems of the River Basin Surveys," for publication in *American Antiquity*. He continued to serve as chairman of the Missouri Basin Chronology Program; as assistant editor of "Current Research" in the Plains Area for *American Antiquity*; and, until December 1, as associate editor of the *Plains Anthropologist*. On December 1 he became editor of that journal. He also participated in

the Visiting Scientist Program of the Nebraska Academy of Sciences and lectured to student groups at Sutton and Sidney, Nebr.

Dr. Stephenson attended the 19½ Plains Conference in Pierre, S. Dak., in July and served as a panel member in a symposium on "The Salvage Program So Far." At the 20th Plains Conference in Lincoln on Thanksgiving weekend he served as local arrangements chairman and as chairman of a symposium on "Plains Chronology." During the period of December 12-21 he attended the "Management Development Program for Field Managers" of the U.S. Department of Agriculture Graduate School, held on the Voorhis Campus of California State Polytechnic College in San Dimas, Calif. He attended the 73d annual meeting of the Nebraska Academy of Sciences in Lincoln on April 27 and the annual meeting of the Society for American Archeology in Boulder, Colo., on May 1-3. While at Boulder he participated in the meeting of the Committee for the Recovery of Archeological Remains and reported on the year's activities of the Missouri Basin Project and on the prospects for the coming year. He wrote several book reviews for scientific journals, gave talks to various local civic organizations on the work of the River Basin Surveys, and represented the Smithsonian Institution at special occasions at the invitation of local civic organizations. He served throughout the second half of the year on the organizing committee for the INQUA meetings to be held in Boulder, Colo., in September 1965, and was named as one of the field conference organizers for a preconference field trip through the Plains area.

Lionel A. Brown, archeologist, when not in charge of field parties, devoted most of his time to analyzing specimen materials he had recovered during the past year and to materials recovered by others in the Missouri Basin in previous years. He completed a major draft of a manuscript entitled "Archeology of the Lower Yellowtail Reservoir, Montana," which describes the work and material recovered from the several sites that he excavated and tested in that area during the summer of 1963. He completed a major draft of a preliminary manuscript entitled "Archeological Investigations in the Pony Creek Watershed, Iowa," which describes the work and reports the analyses of materials he recovered from that area of southwestern Iowa in the spring of 1962. This manuscript will be combined with the report of the work currently being done in that area to form an overall publication on the Pony Creek researches. In the early spring he studied the specimens and field records from the Gillette site (39ST23) in the Oahe Reservoir, excavated by Donald D. Hartle of the Missouri Basin Project in 1957, and nearly completed the major draft of a manuscript covering those investigations.

In July Mr. Brown addressed the Billings Archeological Society in Billings, Mont., on the subject "The Amateur Archeologist in the Salvage Program." During Thanksgiving weekend he attended the 20th Plains Conference in Lincoln and presented two papers, "A Survey of the Pony Creek Watershed" and "Archeology of the Lower Yellowtail Reservoir." Both were published in abstract in the *Proceedings of the 73d Meeting of the Nebraska Academy of Sciences*. He attended the meetings of the Society for American Archeology in Boulder, Colo., on May 1-3. At the end of the year he was again excavating archeological sites in the Pony Creek area of Iowa.

Dr. Warren W. Caldwell, archeologist, was in the field from the beginning of the year until the end of August. He devoted the remainder of his time to specimen and field-record studies concerning sites that he had excavated in previous years. Primary attention was devoted to the analyses (with Richard E. Jensen) of sites 39LM208, 39LM209, and 39LM232, excavated last year in the Big Bend Reservoir of South Dakota by Caldwell and Jensen. He completed the analytical studies and began a manuscript reporting the results. He also completed analyzing materials from, and prepared a major draft of a monograph on, "Investigations at the McKensey Village (39AR-201), South Dakota," a site that he excavated in 1960. In collaboration with G. Hubert Smith, he prepared and submitted for publication a handbook for the U.S. Corps of Engineers' Reservoir Series, entitled "Oahe Reservoir: Archeology, History and Geology." This was the fourth handbook in this series, prepared by the same authors. He also prepared a popular article on "Fortified Villages of the Dakotas," published in *Missouri Basin Progress*. He published two book reviews in the *Plains Anthropologist* and prepared several administrative and progress reports concerning the work of the Missouri Basin Project.

Dr. Caldwell participated in the 19½ Plains Conference in Pierre in July and discussed his current fieldwork. He participated in the 20th Plains Conference in Lincoln at the end of November, presenting a paper on "Investigations in the Lower Big Bend Reservoir, South Dakota" and also serving as a panel member on "Plains Chronology," presenting a discussion of "Dendrochronology in the Plains—Past and Present." He attended the 73d annual meeting of the Nebraska Academy of Sciences and presented a paper, "Primus in Orbe Deos Fecit Timor or Ceramics ad Nauseam," that was published in abstract in the *Proceedings* of the meeting. His paper "Fortified Villages of the Northern Plains" was read in absentia at the annual meeting of the Society for American Archeology in Boulder, Colo., on May 3. Throughout the year he continued to serve as chairman of the dendrochronology section of the Missouri Basin Chronology Program, as con-

tributing editor for book reviews for the *Plains Anthropologist*, and as collaborator for the Plains area for "Abstracts of New World Archeology." He participated in the visiting scientist program of the Nebraska Academy of Sciences, lecturing to student groups at Gretna, Nebr., on January 8. During the period from September to June, on annual-leave time, he served as part-time assistant professor in the Department of Anthropology at the University of Nebraska and taught a course on "The American Indian." At the end of the year he was in the Lincoln laboratory analyzing specimens from past field-work.

John J. Hoffman, archeologist, when not in the field conducting excavations, devoted most of his time to laboratory analyses and preparation of reports resulting from his work of the past season. He completed the analyses of specimen materials and records of his 1962 excavations at the Molstad Village site (39DW234) in the Oahe Reservoir area and prepared a major draft of a manuscript on this work. He completed a short article on the "Molstad Village and the La Roche Sites" and submitted it to the *Plains Anthropologist* for publication. By the time he returned to the field in June he was well along on a manuscript entitled "The Swift Bird Lodge (39DW233)." In July, Hoffman attended the 19½ Plains Conference in Pierre and reported on his fieldwork during the season. At Thanksgiving, he presented a paper at the 73d annual meeting of the Nebraska Academy of Sciences in Lincoln entitled "Temporal Ordering of the Chouteau Aspect." The end of the year found him again in the field engaged in archeological excavations.

Wilfred M. Husted, archeologist, while not in the field conducting archeological excavations, was at work in the laboratory analyzing materials and preparing reports on his activities in the field during the 1962 season and also on materials that others had collected in previous seasons. He wrote a "Preliminary Report of the 1962 Archeological Investigation in the Upper Yellowtail Reservoir," which will be combined with a study of his 1963 season's work in the same area so that there will be a comprehensive monograph on the archeology of that region. He also completed the laboratory analyses of, and prepared a major draft of a monograph on "The Brice (39LM31) and Clarkstown (39LM47) Sites, Fort Randall Reservoir." These two sites were excavated in 1954 by the late Paul L. Cooper. At the 20th Plains Conference, November 22-24 in Lincoln, he presented a paper entitled "Investigations in Upper Yellowtail Reservoir, Montana-Wyoming."

Richard E. Jensen, archeologist, spent July, August, and June in the field conducting archeological excavations and the remainder of the year in the laboratory in Lincoln analyzing materials and

writing reports. He prepared descriptions of the artifacts and features recovered from the Langdeau site (39LM209), the Jiggs Thompson site (39LM202), and the Pretty Head site (39LM232), which he excavated in conjunction with Dr. Caldwell. They include various statistical analyses relative to sequential alinements and relationships to other sites. In July he gave a report of his current fieldwork at the 19½ Plains Conference in Pierre. During Thanksgiving he attended the 20th Plains Conference in Lincoln. On May 18, accompanied by J. J. Hoffman and Dr. Stephenson, he attended an informal conference on Dakota pottery typology in Vermillion, S. Dak. He and Hoffman proceeded from Vermillion to the Big Bend Reservoir area to select campsites for the summer. At the end of the year he was again in the field excavating archeological sites in the Big Bend Reservoir area.

Oscar L. Mallory, archeologist, when not in the field was at work in the laboratory examining materials previously collected. He studied the background data and analyzed the specimens obtained from the "Missouri Breaks" area of Montana and prepared a report on the work entitled "An Archeological Appraisal of the Missouri Breaks Region, Montana." He then began a detailed analysis of the unusual collection of perishable goods from the Mouat Cliff Burial site (24TE401) excavated last year by the Billings Archeological Society, in central Montana, near Hardin. He spent much of his evening and weekend time working on "A Comparative Cultural Analysis of Textiles from McGregor Cave, Washington," his thesis for a master of arts degree at Washington State College. In April he served, with Robert W. Neuman, as adviser to the U.S. Army Corps of Engineers in conference with the local community developers of Mobridge, S. Dak., on a project to reconstruct an earth-lodge village in that area. He presented a paper, "Survey of the Missouri Breaks Area," at the 20th Plains Conference in Lincoln on Thanksgiving weekend. At the close of the year he was conducting archeological excavations in the Oahe Reservoir area.

Robert W. Neuman, archeologist, when not in the field was mainly at work in the laboratory doing research on materials excavated by him in past years in the Oahe and Big Bend Reservoir areas. From October 6 to 13 he was on loan to the University of South Dakota to assist in salvage excavations at the Wolfe Creek Mound site (39HT-201) in Hutchinson County, S. Dak. In the laboratory, he corrected galley proof on his monograph "The Good Soldier Site (39LM238), Lyman County, South Dakota," being published by the Bureau of American Ethnology as a River Basin Surveys Paper. He did research on materials from his Big Bend excavations and brought to near completion a manuscript on "Preceramic Occupations in the Big Bend Reservoir Area, South Dakota." He also served as chairman of

the radiocarbon section of the Missouri Basin Chronology Program. He reported on his current fieldwork at the 19½ Plains Conference in Pierre in July. He attended the 20th Plains Conference in Lincoln, November 22-24, where he served as a panel member in the symposium on "Plains Chronology," presenting a discussion of "Carbon-14 on the Plains—Past, Present and Future." In mid-April he and Oscar L. Mallory served as advisers to the U.S. Army Corps of Engineers in discussions with local community supporters of a project to reconstruct an earth-lodge village near Mobridge, S. Dak. On April 27 he served as chairman of the Anthropology Section of the 73d annual meeting of the Nebraska Academy of Sciences in Lincoln and presented a paper entitled "A Brief Review of Anthropology in the Nebraska Academy of Sciences," that was published in abstract in the *Proceedings* of the meeting. This was the best attended and had the largest selection of outstanding papers of any of the meetings of this section of the Academy since its inception. He also attended the annual meetings of the Society for American Archeology in Boulder, Colo., May 1-3, where he presented a paper entitled "Check Stamping on the Northern Plains," that has been accepted for publication in *American Antiquity*. At the end of the year Neuman was conducting excavations in the Oahe Reservoir area.

G. Hubert Smith, archeologist, spent July, August, and the last half of June conducting archeological excavations, and during the remainder of the year was in the Lincoln office analyzing and doing research on materials from historic sites in the Missouri Basin that he had excavated in previous years. He completed a report on the fieldwork done at the site of Fort George (39ST202) in the summer of 1962, and had a major draft of that manuscript ready for final typing at the end of the year. He continued with the preparation of the comprehensive report on the site of "Like-a-Fishhook Village and Fort Berthold I and II (32ML2), North Dakota." With Dr. Caldwell he prepared a popular booklet on "The Oahe Reservoir: Archeology, History and Geology," that was published by the U.S. Army Corps of Engineers in their Reservoir Series, of which this is the fifth. He also prepared a book review published in *American Antiquity* in April.

Smith attended the 19½ Plains Conference in Pierre in July and reported on his current fieldwork. During the Thanksgiving weekend he attended the Plains Conference in Lincoln, where he reported on "Excavations at Fort George, South Dakota." On January 10, he was the featured speaker at the meeting of the Yankton County Historical Society in Yankton, S. Dak., where he gave an illustrated talk on "Salvage Archeology." On April 27 he attended the 73d annual meeting of the Nebraska Academy of Sciences in Lincoln and presented a paper entitled "Ethnographic Contributions of Ferdinand

V. Hayden." He attended the 17th annual meeting of the Mississippi Valley Historical Association and took part in the historic sites committee meeting of that group. He addressed the Kansas City Archeological Society on "Historical Archeology in the Missouri Basin" on May 7, and on May 19 he gave an illustrated talk on "Historic Buildings of Nebraska" at the Nebraska State Historical Society in Lincoln. At the end of the year he was again in the field conducting investigations of historic sites in the Big Bend Reservoir.

TABLE 1.—*Specimens processed, July 1, 1962–June 30, 1963*

Reservoir	Number of sites	Catalog numbers assigned	Number of specimens processed
Big Bend.....	13	4, 354	24, 196
Missouri Breaks.....	24	178	390
Oahe.....	10	2, 978	22, 400
Pony Creek.....	13	408	1, 775
Yellowtail.....	22	1, 749	3, 038
Site totals.....	82	9, 667	51, 799
Collections not assigned site numbers.....	2	11	24
Overall collection totals.....	84	9, 678	51, 823

As of June 30, 1963, the Missouri Basin Project had cataloged 1,391,219 specimens from 2,410 numbered sites and 60 collections not assigned site numbers.

Specimens restored: Five pottery vessels and six vessel sections.

Specimens donated to the Missouri Basin Project for comparative use: By the W. H. Over Museum, University of South Dakota, courtesy of Dr. Wesley R. Hurt—75 pot rim sherds collected from 39GR1 (Scalp Creek site), 39WW7 (Swan Creek site), and 39WW303. These sherds represent eight pottery wares, namely: Akaska, Le Beau, Randall, Rygh, Scalp, Steamboat, Swan Creek, and Talking Crow.

TABLE 2.—*Record material processed, July 1, 1962–June 30, 1963*

MISSOURI BASIN PROJECT

Reflex copies of records.....	8, 967
Photographic negatives made.....	3, 128
Photographic prints made.....	13, 712
Photographic prints mounted and filed.....	7, 660
Transparencies mounted in glass.....	66
Kodachrome pictures taken in lab.....	72
Cartographic tracings and drawings.....	38
Illustrations.....	27
Lettering of plates.....	12
Profiles drawn.....	92
Plate layouts made for manuscripts.....	18

Virginia.—During the period September 10–November 18, 1962, Carl F. Miller conducted excavations in four sites in the Smith Mountain and Leesville Reservoir areas. Data obtained indicate that the cultural range represented extended from the terminal phase of Late Archaic around 4000 B.C. to the Middle Woodland Period at about A.D. 500. One of the characteristic artifacts normally associated with such remains, namely, stone projectile points, was scarce, while ceramics and bone tools were rather plentiful. There were numerous portions and fragments from clay tobacco pipes. As a matter of fact, those particular objects were much more numerous than has been indicated by evidence from that general area.

Mr. Miller returned to the Smith Mountain Project area on May 15, 1963, and from that date until the end of the fiscal year was occupied in the excavation of the Hales Ford site (44FR15). In the work there thirty-seven 10-foot squares were dug to a depth of 5 feet; 136 features and 1 partial burial were recovered. The burial, representing an early Middle Woodland Phase, was that of a male who was about 60 years of age at the time of death. Mortuary offerings consisted of two turtle-shell dishes. The use of turtle shells for dishes apparently was a well-established trait at that location. At least two new pottery types were found at the Hales Ford site, and they were apparently correlated to a similar textile-impressed type found in the John H. Kerr Reservoir area farther south on the Roanoke River. The latter, however, produced much less of this type than the Smith Mountain Reservoir. The significance of this will need to be determined by further studies in the laboratory. The projectile points recovered are sufficient in number to illustrate a developmental series. This also is true of clay pipes. The bone material was particularly well preserved, and several new types of artifacts were recovered. Potsherds number into the thousands, and it will be possible to restore a number of vessels from them. No European material was found at the site, which apparently was abandoned well before the White man's influence reached that part of Virginia. No evidence was obtained relative to habitations and consequently nothing is known of the type of dwelling used at that locality.

The material from the combined work in the fall of 1962 and the spring of 1963 will give an excellent source of information about a fairly long period of occupation in the upper reaches of the Roanoke River.

ARCHIVES

The Bureau archives continued under the custody of Mrs. Margaret C. Blaker, archivist. She was assisted throughout the year by Miss

Regina M. Solzbacher, and on a part-time basis by Miss Margaret V. Lee.

During the week of September 30–October 6, Mrs. Blaker attended the annual meeting of the Society of American Archivists in Rochester, N.Y., and searched for early photographs of American Indians in the collections of George Eastman House, the Rochester Historical Society, and the Rochester Museum of Arts and Sciences. A considerable number of fine stereoscopic views of the 1870's and 1880's were located at Eastman House, and copies of them are currently being made for the Bureau collections. At the University of Rochester Library Mrs. Blaker examined the notebooks of Louis Henry Morgan that deal with his visits to the Seneca Indians, and the circulars containing the original information collected and used by Morgan in preparing his *Systems of Consanguinity*, published by the Smithsonian in 1870. Microfilm duplicates of the circulars will be made available to the Bureau through the library's special collections division.

On October 12–15 Mrs. Blaker attended the joint annual meeting of the American Indian Ethnohistoric Conference and the Iroquois Conference at Albany, N.Y., and examined photographic and other pictorial resources on the American Indian in the New York State Museum. On November 14–19 she attended the annual meeting of the American Anthropological Association in Chicago and examined pictorial resources in the Newberry Library and the Chicago Natural History Museum. On May 20–21 she visited Carlisle, Pa., to see photographs in the collections of the Army War College and the Hamilton Library. Both of these institutions have albums of excellent photographs of the students who attended Carlisle Indian school and of their parents, many of them distinguished chiefs, who visited the school. Arrangements for borrowing the albums for copying are in progress.

Ethnographic notes of the late Lyda Averill Taylor, on the Alabama, Choctaw, and Koasati, collected in Polk County, Tex., in 1936–40, and a partial draft of a manuscript on comparative southeastern ethnology, were received from John M. Goggin, to whom they had been given in 1960 by Walter W. Taylor.

A ledger containing drawings of war scenes, apparently all drawn by the same Indian artist, was acquired. The book is undated and the artist unidentified, but he was probably a Cheyenne, since the short written titles indicate that the winners of the contests depicted were Cheyennes. Cheyenne warfare with a number of different tribes is portrayed—Osage, Snake (Shoshoni), Pawnee, Ute, Crow, Shawnee, Sac and Fox, Navaho, and Pueblo. There are also a number of pictures of combat with the U.S. Army. Two pictures depict the

Cheyenne Indian "Horse Road in fight with General Miles near Red River," and another, the historic fight of the Cheyenne with Forsyth's scouts at Beecher's Island on September 17, 1868, in which Chief Roman Nose was killed. Another drawing depicts a Cheyenne battle with soldiers under Lieutenant Henley, 6th Cavalry, on Smoky Hill River, and one shows Indians running off cavalry horses at Fort Dodge, 1865.

A sketchbook containing crayon and pencil drawings of Indian life on the Plains, made by a Cheyenne Indian named Buffalo Meat, while he was a prisoner at Fort Marion, Fla., about 1875 was received as a gift from Miss Julia Whiting of Middleburg, Va.

A photograph of an oil painting of the Comanche chief Yellow Wolf, made in 1859 by Col. Arthur T. Lee, and a photograph of a drawing made by Yellow Wolf were received through the courtesy of Charles F. Hayes III, of the Rochester Museum of Arts and Sciences, Rochester, N.Y., which owns the originals.

Negatives of four sketches of Missisauga Indians, three of Hurons and two of Creek Indians, all drawn by Basil Hall in 1827-28, were obtained from the Lilly Library, Indiana University, which owns the original drawings.

An important collection of photographic negatives and prints, taken by Jesse Hastings Bratley in the period 1893-ca. 1903, while he was teaching at Indian schools in the West, was lent by Francis V. Crane, director of the Southeast Museum, Marathon, Fla. A total of 280 copy negatives were made and added to the Bureau files. Most of the negatives relate to the Dakota Indians of Rosebud Reservation, S. Dak.; the Havasupai of Cataract Canyon, Ariz.; and the Hopi of Polacca, Ariz. There are also a few photographs of Salish Indians of Puget Sound, and of Cheyenne and Arapaho from Contonment, Okla.

A series of 36 negatives taken at the mouth of Windy River, north-western extremity of Neultin Lake, southwestern Keewatin, Canada, in 1947 shows Caribou Eskimo and a few Cree Indians. The negatives include portraits; camp scenes showing food and hide preparation; and views of transport by canoe and on foot with pack and dog travois. They were made and donated by Dr. Francis Harper, Chapel Hill, N.C. Dr. Harper also donated five negatives showing Poospatuck men and native fishing equipment, taken by him at the Poospatuck Reservation, Mastic, Long Island, in 1909 and 1910.

A series of 11 photographs taken at the Poospatuck Reservation, Mastic, Long Island, showing members of the Poospatuck tribe, and views taken at the June meeting at Poospatuck in 1912, were copied from an album of snapshots owned by Walter B. Raynor, Patchogue, N.Y. Two photographs of White men's hunting camps having pal-

metto-thatch structures built in the Seminole style were from the same album.

Nineteen portraits of Jicarilla Apaches and views taken on the Jicarilla Reservation near Dulce, N. Mex., ca. 1915-62, were copied from photographs lent by Dr. D. Harper Sims, Arlington, Va.

Negatives of four views of the monument on the grave of the Choctaw chief Pushmataha, in the Congressional Cemetery, Washington, D.C., were deposited by Dr. William C. Sturtevant.

A photograph of a Shoshoni chief, Jack Edmo, and his family, taken about 1917, was donated by Mrs. Arthur White, Middleburg, Va.

A collection of 90 Indian portraits from the studios of a number of late 19th-century commercial photographers was obtained through Carl Russell, Orinda, Calif. Over 50 of the portraits are of members of various Dakota tribes; other tribes represented are Apache, Crow, Diegueño, Maricopa, Papago, and Yuma.

A collection of approximately 675 photographic negatives made in the approximate period 1900-1920 has been acquired but is not yet cataloged in detail. The collection consists of studio and outdoor portraits, camp scenes, views of dances, and other subjects. Of the more than 25 tribes represented, the principal ones are: Apache, Arapaho, Assiniboin, and Gros Ventres; Blackfoot, Cheyenne, Crow, Dakota, Eskimo, Hopi, Osage, Pawnee, Seminole, and Wichita.

LIBRARY

During the year 1962-63, work continued on the organization of the collection and its records under the supervision of Mrs. Carol Jopling in the Bureau of American Ethnology Library.

When the library's maps were evaluated, several very old and rare ones were discovered. Among them were a Nicholas Visscher map of the Western Hemisphere, *Novissima et Accuratissima Totius Americae*, and *Nova Belgica et Anglia Nova* by W. J. Blaeu (Amsterdam, 1635). Of particular interest to the Bureau, however, was the *Census of the State of California* (1852) map and a quantity of other North American maps with linguistic and archeological annotations.

Some fine books were given to the library, including a set by Sir Richard Phillips, *A Collection of Modern and Contemporary Voyages and Travels* (London, 1805-) presented by Dr. Frank H. H. Roberts, Jr.

The librarian attended the Special Libraries Convention in Denver, June 9-14, 1963, and visited a number of libraries and museums having special collections on the North American Indian and Western history.

The following statistics will serve to indicate some of the work conducted in the library:

Reference questions answered-----	1,820
Library users-----	1,301
Publications circulated-----	1,071
Loans to other libraries-----	151
Volumes sent for binding-----	1,103

EDITORIAL WORK AND PUBLICATIONS

The editorial work of the Bureau continued during the year under the immediate direction of Mrs. Eloise B. Edelen. The following publications were issued:

Seventy-ninth Annual Report of the Bureau of American Ethnology, 1961-62. ii+29 pp., 2 pls. 1963.

Bulletin 181. Isleta paintings, with introduction and commentary by Elsie Clews Parsons. Edited by Esther S. Goldfrank. xvi+299 pp., 142 pls. 1962.

Bulletin 182. River Basin Surveys Papers, No. 25. Frank H. H. Roberts, Jr., editor. xvi+447 pp., 110 pls., 65 figs., 20 maps. 1962.

Archeology of the John H. Kerr Reservoir Basin, Roanoke River, Virginia-North Carolina, by Carl F. Miller. With appendix: Human skeletal remains from the Tollifero (Ha6) and Clarksville (Mc14) sites, John H. Kerr Reservoir Basin, Virginia, by Lucile E. Hoyme and William M. Bass.

Bulletin 184. The Pueblo of Sia, New Mexico, by Leslie A. White. xii+358 pp., 12 pls., 55 figs. 1962.

Bulletin 185. River Basin Surveys Papers, Nos. 26-32, Frank H. H. Roberts, Jr., editor. xii+344 pp., 57 pls., 43 figs., 5 maps. 1963.

No. 26. Small sites on and about Fort Berthold Reservation, Garrison Reservoir, North Dakota, by George Metcalf.

No. 27. Star Village: A fortified historic Arikara site in Mercer County, North Dakota, by George Metcalf.

No. 28. The dance hall of the Santee Bottoms on the Fort Berthold Reservation, Garrison Reservoir, North Dakota, by Donald D. Hartle.

No. 29. Crow-Flies-High (32MZ1), a historic Hidatsa village in the Garrison Reservoir area, North Dakota, by Carling Malouf.

No. 30. The Stutsman Focus: An aboriginal culture complex in the Jamestown Reservoir Area, North Dakota, by R. P. Wheeler.

No. 31. Archeological manifestations in the Toole County section of the Tiber Reservoir Basin, Montana, by Carl F. Miller.

No. 32. Archeological salvage investigations in the Lovewell Reservoir Area, Kansas, by Robert W. Neuman.

Bulletin 188. Shonto: A study of the role of the trader in a modern Navaho Community, by William Y. Adams. xi+329 pp., 10 pls., 3 figs., 3 maps, 12 charts. 1963.

Publications distributed totaled 17,722 as compared with 19,326 for the fiscal year 1962.

ILLUSTRATIONS

The staff artist for the Bureau of American Ethnology, E. G. Schumacher, prepared the illustrations to accompany 16 manuscripts to be

published by the Bureau, some as entire bulletins and others composing bulletins in the Anthropological Papers and the River Basin Surveys Papers series. The work included the drawing or redrawing of maps, diagrams, charts, and other text figures, and effectively combining and mounting photographs, all covering the fields of anthropology, archeology, and ethnology. Approximately 500 illustrations were prepared.

MISCELLANEOUS

Dr. M. W. Stirling, Dr. A. J. Waring, and Sister Inez Hilger continued as research associates. Dr. Wallace L. Chafe, linguist on the staff of the Bureau from April 4, 1959, resigned on August 20, 1962, to accept an associate professorship in the department of linguistics at the University of California in Berkeley.

In addition to the usual extensive correspondence answering specific questions, many of which were of a technical nature, the Bureau prepared several bibliographies to provide reference material for which there has been recurring demand. Among those recently compiled, the following were printed by the multilith process:

SIL-2, 3d rev., 6/63: Selected bibliography on arrowheads. 5 pp.

SIL-105, rev., 7/62: Selected bibliography on Cherokee customs and history. 6 pp.

SIL-174, rev., 6/63: Selected references on the Indians of Southeastern North America. Compiled by William C. Sturtevant. 17 pp.

SIL-363, 4/63: Bibliography of wild food plants of Canadian Indians. Compiled by F. R. Irvine. 13 pp.

Other bibliographies prepared are in typescript.

More than 100 specimens, both ethnological and archeological, were received by mail or brought to the office for identification and such information as could be provided by Bureau specialists.

Respectfully submitted.

FRANK H. H. ROBERTS, Jr., *Director.*

DR. LEONARD CARMICHAEL,

Secretary, Smithsonian Institution.

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Eighty-first Annual Report

of the

BUREAU OF AMERICAN ETHNOLOGY

1963-1964



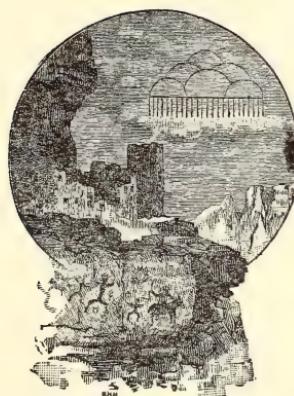
SMITHSONIAN INSTITUTION
WASHINGTON
D.C.

EIGHTY-FIRST
ANNUAL REPORT OF THE

BUREAU OF
AMERICAN ETHNOLOGY

TO THE SECRETARY OF THE
SMITHSONIAN INSTITUTION

1963-1964



U.S. GOVERNMENT PRINTING OFFICE
WASHINGTON : 1965

BUREAU OF AMERICAN ETHNOLOGY

June 30, 1964

Acting Director.—HENRY B. COLLINS.

Anthropologists.—HENRY B. COLLINS, ROBERT L. STEPHENSON, WILLIAM C. STURTEVANT, ROBERT M. LAUGHLIN.

Research Associates.—SISTER M. INEZ HILGER, MATTHEW W. STIRLING, A. J. WARING, JR.

Archivist.—MRS. MARGARET C. BLAKER.

Scientific illustrator.—E. G. SCHUMACHER.

Administrative assistant.—MRS. JESSIE S. SHAW.

RIVER BASIN SURVEYS

Acting Director.—ROBERT L. STEPHENSON.

Chief, Missouri Basin Project.—WARREN W. CALDWELL.

Archeologists.—LIONEL A. BROWN, JOHN J. HOFFMAN, HAROLD A. HUSCHER, WILFRED M. HUSTED, RICHARD E. JENSEN, OSCAR L. MALLORY, CARL F. MILLER, ROBERT W. NEUMAN, G. HUBERT SMITH.

EIGHTY-FIRST ANNUAL REPORT
OF THE
BUREAU OF AMERICAN ETHNOLOGY

HENRY B. COLLINS, *Acting Director*

SIR: I have the honor to submit the following report on the field researches, office work, and other operations of the Bureau of American Ethnology during the fiscal year ended June 30, 1964, conducted in accordance with the act of Congress of April 10, 1928, as amended August 22, 1949, which directs the Bureau "to continue independently or in cooperation anthropological researches among the American Indians and the natives of lands under the jurisdiction or protection of the United States and the excavation and preservation of archeologic remains."

SYSTEMATIC RESEARCHES

Dr. Frank H. H. Roberts, Jr., devoted most of the first quarter of the fiscal year to office duties and to general supervision of the activities of the Bureau and the River Basin Surveys. In mid-October he went on extended sick leave and retired on June 5, 1964, after 37 years 10 months of service. During his absence from the office and the period from his retirement to the end of the fiscal year, Dr. Henry B. Collins assumed administrative responsibility for the Bureau as acting director, and Dr. Robert L. Stephenson functioned in a similar capacity for the River Basin Surveys.

In August, Dr. Henry B. Collins, anthropologist, made a trip to L'Anse aux Meadows, northern Newfoundland, on behalf of the National Geographic Society, to check the authenticity of an archeological site which its discoverer, Helge Ingstad, of Oslo, Norway, believed to be of Norse origin. As a result of his examination of the site, Dr. Collins was able to verify this conclusion. The ruins of sod-walled houses excavated by Mr. Ingstad at L'Anse aux Meadows are definitely not Indian or Eskimo, and there is nothing to indicate that they were the work of later English, French, or Portuguese fishermen. On the other hand, the house ruins and associated features are closely similar to those found at Viking sites in Greenland and Iceland. Thirteen radiocarbon dates, based on charcoal from the house ruins, cluster around the year A.D. 1000. This is the period of the Vinland voyages, when, according to the sagas, Leif Ericson, Thorfinn Karlsefni, and other Norsemen sailed westward and discovered the American mainland.

Dr. Collins continued to serve as a member of the board of governors of the Arctic Institute of North America, as a member of its publications committee and as chairman of the committees directing two of the Arctic Institute's projects—a Russian translation program and the *Arctic Bibliography*. The latter is a comprehensive reference work which abstracts and indexes in English the contents of publications in all languages and in all fields of science pertaining to the Arctic and subarctic regions of the world. This work, which is supported by a number of military and civilian agencies of the United States and Canada, began operating in 1947, and to date has published 11 large volumes containing abstracts of 69,455 scientific publications on the Arctic. The other Arctic Institute project being carried out under Dr. Collins' direction, *Anthropology of the North: Translations from Russian Sources*, continued its operations under a renewed grant from the National Science Foundation. The latest volume in the translation series, *Studies in Siberian Shamanism*, edited by Dr. Henry N. Michael, was published by the University of Toronto Press in December 1963.

Dr. Robert L. Stephenson was transferred on September 29, 1963, from chief of the Missouri Basin Project, River Basin Surveys, Lincoln, Nebr., to the regular staff of the Bureau of American Ethnology as assistant director of the River Basin Surveys. He has devoted his time to familiarizing himself with the activities of the Washington headquarters of the River Basin Surveys, to the general supervision of that unit, and to sorting materials and writing his reports on past field researches. In November he attended the Southeastern Archeological Conference in Macon, Ga. He spent the period November 29 to December 5 in Lincoln, Nebr., consulting with representatives of the National Park Service and State cooperative agencies on research plans for the River Basin Surveys for the coming year. On February 12-13 he participated in the annual meeting of the Committee for the Recovery of Archeological Remains, in Washington, D.C., and detailed the program of systematic researches of the River Basin Surveys. During May 7-9 he attended the annual meeting of the Society for American Archeology at Chapel Hill, N.C. On May 10 he was the featured speaker at the semiannual meeting of the Maryland Archeological Society in Washington, D.C., and presented an illustrated lecture on the "Archeology of the Middle Atlantic Seaboard Area."

During the early part of the fiscal year, Dr. William C. Sturtevant, ethnologist, was engaged in completing his paper on "Studies in Ethnoscience" (still in press at the end of the year) and in preparing for a year's field work in Burma. In July he flew to Gainesville, Fla., to work with Dr. Irving Rouse, of Yale University, and Dr. Charles

H. Fairbanks, of the University of Florida, on projects concerning the editing of the obituary and collected writings of the late Dr. John W. Goggin. He also advised the University's Department of Anthropology on the disposition of the Goggin manuscripts, notes, papers, etc., and outlined plans for the publication of nearly completed manuscripts.

Publications issued by Dr. Sturtevant during the fiscal year 1964 included the translation and annotation of "A Jesuit Missionary in South Carolina, 1569-70," by Father Juan Rogel, pp. 167-175 in *The Indian and the White Man* (edited by Wilcomb E. Washburn); (with John M. Goggin) "The Calusa, a Stratified, Non-Agricultural Society (with notes on sibling marriage)," pp. 179-219 in *Explorations in Cultural Anthropology: Essays Presented to George Peter Murdock* (edited by W. H. Goodenough); "Five Civilized Tribes," *Encyclopediæ Britannica*, vol. 9, pp. 396-397; "Seminole," *Encyclopediæ Britannica*, vol. 20, p. 313H; "John White's Contributions to Ethnology," pp. 37-43 in vol. 1 of *The American Drawings of John White, 1577-1590* (edited by Paul H. Hulton and David B. Quinn); and obituary of John M. Goggin, 1916-1963, *American Anthropologist*, vol. 66, No. 2, pp. 385-394.

Dr. Sturtevant¹ left the country on October 4 for Burma, to undertake field work supported by a grant from the National Science Foundation.

From July to October Dr. Robert M. Laughlin, ethnologist, continued field work in Chiapas, Mexico, where he recorded and translated a series of 251 dreams of the Tzotzil Indians of Zinacantán, Chiapas. He discovered that dreams are recognized by the natives to be a form of mental telepathy, a two-way communications system, whereby the dreamer's soul is in contact with the divine and with the souls of fellow (usually hostile) mortals. Dreams are held to be an indication of an individual's success in withstanding enemy attack.

Dr. Laughlin spent November and December in Santa Fe, N. Mex., accompanied by two Zinacantec informants who provided additional material for the compilation of a Tzotzil dictionary. His time in Washington was devoted to continuing research on his dictionary which involved the study of 17th- and 18th-century Tzotzil-Spanish manuscripts. He selected much of his own textual materials for use by the Coordinated Study of Tzeltal-Tzotzil Drinking of the University of Rochester. Selections of music from Zinacantán and Martinique were contributed to the Cantometrics Research Project of Columbia University for cross-cultural analysis.

In collaboration with Dr. B. N. Colby, of the Laboratory of Anthropology, Museum of New Mexico, Dr. Laughlin initiated a computer

¹ Temporarily transferred to Smithsonian private roll.

analysis of the values expressed in Tzotzil myths and dreams. It is hoped that the results will demonstrate in specific terms the close relationship between mythic and oneiric expression.

A chapter on Zinacantec dream interpretation written by Dr. Laughlin was accepted for publication in *Ensayos Sobre Zinacantán* (E. Z. Vogt, ed.). His chapter, entitled "Tzotzil," for the *Handbook of Middle American Indians*, is in preparation.

In addition, Dr. Laughlin attended the 62d annual meeting of the American Anthropological Association (San Francisco, November 21-24) in company with his Zinacantec informants. A journal of their travels in Mexico and the United States was written by the informants in their native language. Dr. Laughlin conducted library research at Harvard University (May 27-29) and participated in an informal conference at Palo Alto (June 4-6) as a consultant for the Chicago-Harvard-Stanford Chiapas Aerial Survey Project.

RIVER BASIN SURVEYS

(Prepared by Robert L. Stephenson, acting director, from data submitted by staff members)

The River Basin Surveys, a unit of the Bureau of American Ethnology, continued its activities throughout the year. This unit was organized in 1945 to cooperate with the National Park Service and the Bureau of Reclamation of the Department of the Interior, the Corps of Engineers of the Department of the Army, and State and local institutions in the program for salvage archeology in areas to be flooded or otherwise destroyed by the construction of large dams. Its purpose has remained the same over the years and its activities during the current year were directed toward the same objectives. The research investigations during 1963-64 were supported by a transfer of \$254,500 from the National Park Service and a carryover of \$95,768 of Missouri Basin money to support investigations within the Missouri River Basin. Additional funds were available from two other sources. A previous grant from the Appalachian Power Co. had a carryover of \$5,038 to support the research along the Roanoke River in southern Virginia at the Smith Mountain Project. Another earlier contribution by the Idaho Power Co. to support the researches in the Hells Canyon Reservoir area on the Snake River in Oregon and Idaho had a carryover of \$4,080. The latter investigation was carried on as a cooperative project between the River Basin Surveys and the Museum of Idaho State University at Pocatello. The grand total of funds available for the River Basin Surveys in 1963-64 was \$359,386.

Field researches consisted largely of surveys and excavations. Most

of the work was concentrated in the digging or testing of sites, but surveys were made in four new reservoir areas in North Dakota and one new reservoir area in South Dakota. At the beginning of the fiscal year there were 12 crews at work. One field crew was operating in the Smith Mountain Reservoir area in southern Virginia, seven parties were at work in the Oahe and Big Bend Reservoir areas of South Dakota, one party was excavating in the Yellowtail Reservoir area in Montana and Wyoming, and another was working in the Pony Creek drainage area in Iowa. A special crew was in Lawrence, Kans., studying human skeletal remains from the Oahe Reservoir, and one survey team was at work in North and South Dakota. During the second quarter of the year, parties worked briefly in Alabama, Nebraska, and Wyoming. In May two brief surveys were made in South Dakota, and in June nine parties began major operations in the Missouri Basin, where they were at work at the end of the fiscal year.

As of June 30, 1964, archeological surveys and excavations had been made, since the start of the salvage program, in a total of 269 reservoir areas, located in 29 States, as well as in 2 lock projects, 4 canal areas, and 2 watershed areas. Since 1946, when the field work of the program got underway, 5,040 sites have been located and recorded; of that number 1,186 were recommended for excavation or limited testing. Because of the emergency conditions under which the salvage program must operate, it is rarely possible to fully excavate a site. "Excavation," as used here, usually means that about 10 percent of the site was dug. By the end of the fiscal year, 526 sites in 55 reservoir basins and 2 watershed areas had been tested or excavated to a degree where good information about them had been obtained. These sites range in nature from simple camping areas, once occupied by early hunting and gathering Indians of some 10,000 years ago, to village remains left by the historic Indians of the mid-19th century and the remains of frontier trading posts and military installations of European origin.

The results of these extensive investigations have been incorporated in technical reports that have been published in various scientific journals, in Bureau of American Ethnology Bulletins, and in the Smithsonian Miscellaneous Collections. *River Basin Surveys Papers Nos. 33-38*, constituting *Bureau of American Ethnology Bulletin 189*, were released in June. These papers pertain to excavations carried out in North Dakota, South Dakota, and Kansas. Reports of other excavations in the Dakotas and in Oregon and Idaho are now being assembled for another Bulletin. Staff members cooperated throughout the year with representatives of other Federal agencies in the preparation of short popular pamphlets about some of the major reservoir projects.

As in previous years, the River Basin Surveys received helpful cooperation from the National Park Service, the Bureau of Reclamation, the Corps of Engineers, the Geological Survey, and numerous State and local institutions. The National Park Service continued to serve as liaison, among the various agencies, both in Washington and in the field, and prepared budget estimates and justifications for the funds needed to support the salvage program. Party leaders were assisted in many ways by personnel of all the cooperating agencies, and the relationship was outstanding in all areas.

General direction and supervision of the program were continued from the main office in Washington. Work in the Missouri Basin was directed by the field headquarters and laboratory in Lincoln, Nebr. The project in Virginia was supervised by the Washington office.

Washington office.—Dr. Frank H. H. Roberts, Jr., continued the direction of the entire River Basin Surveys from the main headquarters in the Bureau of American Ethnology until October 15 when he went on sick leave. At that time, Dr. Robert L. Stephenson, who had been transferred from the field headquarters in Lincoln, Nebr., on September 30, to be assistant director, was designated acting director and served in that capacity during the remainder of the year. Carl F. Miller and Harold A. Huscher, archeologists, were based at the headquarters office throughout the year.

At the beginning of the year Mr. Huscher was in the Washington office working on his materials from the Walter F. George Reservoir area and other areas along the Chattahoochee River. At the end of October he visited the recently flooded Walter F. George Reservoir area to recheck some of the sites along the shore that were beginning to erode, and to examine sites in the vicinity of Columbus, Ga., and Montgomery, Ala., that are threatened with destruction from industrial development. During the period December 12-25, he returned to Montgomery, Ala., to assist the Montgomery Museum of Fine Arts in the emergency salvage of parts of the Shine Mound site, which was threatened with destruction by a municipal waterplant. This work was done in cooperation with David W. Chase, curator of the Montgomery Museum of Fine Arts.

On September 6-8, Mr. Huscher attended the joint Plains-Pecos Conference at Fort Burgwin, Taos, N. Mex., where he presented a paper on "Plains Influences Directly Recorded in Navajo and Western Apache Culture." In November he attended the Southeastern Archeological Conference in Macon, Ga., and presented a paper entitled "A Summary of the Walter F. George River Basin Surveys Salvage Program." His paper read at the preceding conference was published under the title "The Archaic of the Walter F. George Reservoir Area" in *Proceedings of the 19th Southeastern Archeological Conference*,

Bulletin 1, March 1964. He attended the Eastern States Archeological Conference during November 9-10 and there presented a report on "The Cool Branch Site (9QU5), Quitman County, Georgia, a Fortified Mississippian Town with Tower Bastions." He participated in a roundtable discussion of current Early Man problems at the annual meeting of Section H of the American Association for the Advancement of Science, in Cleveland, Ohio, December 26-30. Early in May he attended the annual meeting of the Society for American Archeology in Chapel Hill, N. C., and read a paper, "The Standing Boy Flint Industry, an Early Archaic Manifestation on the Chattahoochee River in Alabama and Georgia," which consisted of an interim report on three archeological sites near Columbia, Ala. The latter paper and an ethnographic background paper on aboriginal salt trade, "Salt Traders of Cibola," have been accepted for publication in professional journals.

At the beginning of the year Mr. Miller was in charge of a field party in southern Virginia. On July 28 this project was brought to a close and he returned to the office in Washington. During the remainder of the year he devoted his time to research on some of his past fieldwork. He completely revised and enlarged his preliminary manuscript on "Prehistoric Occupations of the Ft. Lookout Site (39-LM57), Ft. Randall Reservoir, South Dakota." He had two papers accepted for publication in *Southern Indian Studies*: "A Napier-like Pottery Vessel from Russell Cave" and "Human-headed Adornos from Western Georgia." He had one paper accepted for publication in *The Masterkey*: "Bone Flutes from Southern Virginia." He attended the annual meetings of the Southeastern Archeological Conference in Macon, Ga., early in November and presented a paper on "The Appearance of Certain Projectile Points through Time at Russell Cave, Alabama." On December 30 he presented a paper at the annual meeting of the American Association for the Advancement of Science, in Cleveland, Ohio, entitled "Paleo-Indian and Early Archaic Projectile Point Forms from Russell Cave, Northern Alabama." In February he served as judge at two science fairs in Alexandria, Va., where he evaluated 195 public-school science exhibits. He prepared a bibliography on "Hopewell Culture" and one on "The Red Paint People" to answer inquiries from college students.

On March 21 Mr. Miller presented a paper, "The Archeology of Southern Virginia," at the meeting of the Shenandoah chapter of the Archeological Society of Virginia, in Strasburg, and while there examined several local collections of Indian materials and advised the chapter on their plans for a spring excavation program. During May 7-9 he participated in the annual meeting of the Society for American Archeology at Chapel Hill, N.C., and presented a paper on "The

Archeological Horizons within Russell Cave, Alabama." His article "Polyhedral Cores from Northeastern Kansas," published in the *Plains Anthropologist*, was reprinted in *The Chesopican*, a journal of Atlantic coast archeology. His monograph "The Archeological Investigations at the Hosterman Site (39PO7), Oahe Reservoir Area, Potter County, South Dakota" was published as *River Basin Surveys Paper No. 35* in *Bureau of American Ethnology Bulletin 189*.

Missouri Basin.—At the end of its 18th year of operation, the Missouri Basin Project was well established in new quarters at 1835 P Street, Lincoln, Nebr. Although the move to the new location was made during fiscal year 1963, much of the new physical plant was not completed until well into the first quarter of 1964. For the first time in many years the Project has had enough space to meet with its current and immediately foreseeable needs. Office accommodations are now adequate, storage problems have been eased, and processing facilities are vastly improved.

Activities during fiscal year 1964 included large-scale excavations, surveys, processing and analysis of materials, preparation of manuscripts, and the reporting of archeological results. During the summer months, major efforts were devoted to excavations; the remainder of the year was devoted largely to analyses and the preparation of reports. The special chronology program begun in January 1958 was continued throughout the year. Dr. Robert L. Stephenson served as chief of the Project through the first quarter of the fiscal year. At the beginning of the second quarter he was succeeded by Dr. Warren W. Caldwell, who continued in the position through the remainder of the year.

At the beginning of the year the permanent staff, in addition to the chief, consisted of 9 archeologists, 1 administrative assistant, 1 secretary, 1 administrative clerk, 2 clerk-typists, 1 scientific illustrator, 1 photographer, and 4 museum aides. The temporary staff consisted of 73 persons. There were 3 archeologists, 2 physical anthropologists, 4 cooks, and 64 field crewmen.

During July and August, 12 field crewmen were added to the temporary staff. By the end of the last week in September the employment of all the field crewmen and cooks had been terminated, with the exception of one crewman who was later transferred to the permanent staff as museum aide. The services of all the other temporary employees were terminated by early October. Other changes in the permanent staff were: termination of positions of one museum aide, one archeologist, and the administrative clerk; the death of one museum aide, and the appointment of one museum aide and one laborer. The chief was transferred to the Bureau of American Ethnology on September 30. Additions to the temporary staff during June were 2 archeologists, 5 cooks, and 66 field crewmen.

At the end of the fiscal year the permanent staff consisted of 19 persons; these were, in addition to the chief, 7 archeologists, 1 administrative officer, 1 secretary, 1 administrative clerk (typist), 1 clerk-typist, 1 scientific illustrator, 1 photographer, 4 museum aides, and 1 laborer. The temporary staff consisted of 73 persons. There were 2 archeologists, 5 cooks, and 66 field crewmen.

During the year there were 24 Smithsonian Institution, River Basin Surveys, field parties at work in the Missouri Basin. Eleven of these were in operation during July and August, 2 during October and November, and 11 during June.

At the beginning of the year John J. Hoffman and a crew of 10 men were excavating at the La Roche sites (39ST9, 39ST232)² in the Big Bend Reservoir of central South Dakota. Site 39ST9, on the right bank of the Missouri near the mouth of P L creek, consists of about 90 house depressions scattered over an area of about 80 acres. Seven circular houses were excavated, all of which were essentially similar and which appear to be representative of the Chouteau Aspect.

The site also produced evidence of the Grand Detour Phase, an early development within the prehistoric Middle Missouri Tradition, as well as a small oval structure assignable, on the basis of the ceramics, to the Plains Woodland Phase. Fortunately, the stratigraphic evidence is clear. The Plains Woodland component precedes the Grand Detour component which in turn underlies the principal Chouteau occupation. While these temporal relationships have been recognized for some time, there have been few instances of such satisfactory superimposition.

Site 39ST232 occupies something less than 40 acres of level terrace 1½ miles north of 39ST9. Of the six or seven depressions visible, two were investigated. Both proved to contain circular houses of the Chouteau Aspect. However, one was distinctive in its large diameter (75 feet) and in the presence of six central support posts instead of the usual pattern of four. On the basis of artifacts and architectural evidence, the Chouteau components of 39ST232 and 39ST9 appear to be intimately related. The field party completed work on August 30, after 79 days in the field.

A second field party of nine men, directed by Richard E. Jensen, was at work in the cul-de-sac in the central part of the Big Bend Reservoir. This region, on the left bank of the Missouri, within the great bend that gives the reservoir its name, contains a large number

² Site designations used by the River Basin Surveys are trinomial in character, consisting of symbols for State, county, and site. The State is indicated by the first number, according to the numerical position of the State name in an alphabetical list of the United States; thus, for example, 32 indicates North Dakota, 39 indicates South Dakota. Counties are designated by a two-letter abbreviation; for example, ME for Mercer County, MN for Mountrail County, etc. The final number refers to the specific site within the indicated State and county.

of archeological sites. Although 10 of them were excavated or tested by the field group, results were not encouraging. Apparently the area was occupied quite extensively but cultural debris is scanty and the habitation sites thin.

At the Gregg site (39HY222), one of the largest in the pocket, portions of two earth lodges were excavated and five interhouse areas were tested. A single circular lodge and several tests were dug at the Fry site (39HU223), two lodges were exposed at site 39HU224 nearby, and a lodge and two large cache pits were cleared at the Hawk site (39HU238). Architectural features were not found at the remaining sites, but several clusters of exterior cache pits were cleared at the Saint John site (39HU213) and artifact collections were made at sites 39HU225, 39HU230, 39HU231, 39HU249, and 39HU250.

The earth-lodge structures excavated within the area of the cul-de-sac are all quite similar. Each was circular, with an irregular pattern of wall posts and four central supports. Entrance passages, where found, opened to the south or southwest. A small central hearth was characteristic and there were usually secondary firepits and one or more small basin-like or bell-shaped cache pits.

Ceramics were preponderantly simple-stamped, with Talking Crow and "Category B" rims most usual. Other artifacts were not distinctive, and except for several copper pendants and an iron blade hafted in a split bison rib from the Hawk site, there was no evidence of European contact.

On August 12 Jensen transferred his field party to the right bank of the Missouri where he assisted Hoffman in the excavation of the La Roche sites. The party completed work on August 23, after 72 days in the field.

At the beginning of the year, a third party of nine men, directed by William J. Folan, was assisting John J. Hoffman in excavations at the La Roche sites. On July 16 the Folan party moved to the left bank of the Missouri to begin work at the Chapelle Creek or Grandle site (39HU60), a large, fortified, multicomponent village in the central Big Bend Reservoir. Extensive trenching, exposing sections of three houses, a section of the defensive ditch, and a number of other features, was completed. Evidence of the earliest occupation consists solely of artifacts that are invariably found in the prehistoric, rectangular house complexes of the Big Bend region. The second component consists of the fortified settlement proper, which seems to be attributable to the historic Stanley-Le Beau complexes usually regarded as Arikara. The uppermost deposits contain additional European materials that are suspected to be the remains of a small (and poorly documented) trading post. In view of our present knowledge of the early history of the Big Bend region, it may be difficult, if not impos-

sible, to distinguish the traders' remains from those of the 18th-century Arikara.

During the first half of the field season the Folan group shared camp facilities with the Hoffman crew. The party completed work in August 30, after 79 days in the field.

At the beginning of the year a fourth party of five men, directed by G. Hubert Smith, was investigating historic sites within the Big Bend Reservoir. Excavations were made at the Red Cloud Agency (39LM247), on the right bank of the Missouri near Medicine Creek. The Agency, established for the Oglala Sioux, under Red Cloud, was used only briefly (1877-78) before the group was settled permanently on the Pine Ridge Reservation. Although little survived at the Red Cloud site (apparently the buildings had been systematically removed), some structural details were recovered together with a small group of representative specimens.

A thorough search was made of Dorion or Cedar Island, near the mouth of Cedar Creek, for the site of a trading post established in 1802 or 1803 by Regis Loisel. Despite excellent descriptions left by members of the Lewis and Clark Expedition, the post could not be located; however, another site (39HU301) found on the island was partially excavated. Cultural remains were not abundant but the appearance of the site and the presence of a number of machine-made objects suggest that the site was occupied during the 1860's by White "squatters" who supplied wood for steamboat fuel.

An intensive reconnaissance was made near the mouth of Medicine Creek, continuing a search begun some years ago for the Fort Defiance (or Bouis) trading post known to have been in existence in the 1840's. Although there were several hopeful leads, the search was fruitless. The Smith party shared camp facilities with Hoffman's crew. They returned to Lincoln on August 30 after 79 days in the field.

Three field parties were at work in the Oahe Reservoir at the beginning of the fiscal year. The first, a crew of 10 men, directed by Robert W. Neuman, was excavating at two prehistoric sites in Dewey County on the right bank of the Missouri near Mobridge, S. Dak. The Grover Hand Mounds (39DW240) include five tumuli, one of which was excavated by Neuman in 1963. Two additional examples were dug during the current year. The first was 90 feet in diameter and slightly more than 4 feet high. It covered a central subfloor burial pit containing about 23 secondary human burials of both sexes and various ages, some of which were sprinkled with hematite. The burials were in association with a number of implements and ornaments of bone and stone. Support logs overlay the burial pit, and above was another secondary burial partly covered by an inverted basket and associated with stone and shell artifacts. On the mound floor, adjacent to the

pit, were the partially articulated skeletons of at least six bison. The second mound was much the same as the first. However, the burial pit did not contain more than 12 individuals, and there were no human remains above.

Artifact materials from the two mounds included a few cord-paddled pottery sherds, rentalium, busycorn and olivella ornaments, an antler pin, worked antler butts and tines, bone awls, beads, serrated fleshers, beaver incisors, stone projectile points, matting, pigments, and a considerable variety of other materials. On the basis of burial pattern and the artifacts excavated, the Grover Hand Mounds show a very close relationship to the neighboring Swift Bird Mounds (39DW233) and to the Boundary and Baldhill Mound sites in North Dakota.

At the end of July the Neuman party shifted to the Stelzer site (39DW242) to continue excavations begun during 1963. This site is a large camp area only a short distance from the Grover Hand Mounds. The occupation level, less than 1½ feet below the present surface, is characterized by scattered midden heaps, small firepits, and circular pits filled with detritus. There were also 17 randomly distributed bison long bones stuck vertically into the occupation surface. Artifacts from the Stelzer site, particularly projectile points and pottery, are closely comparable to those from the adjacent mound sites. There seems to be good evidence here for the first direct relationship between burial mounds and a habitation site in the northern Plains.

The party concluded work on August 23 after 74 days in the field. Subsequently, Neuman and a single crewman visited previously unreported mound sites along the Sheyenne River in Barnes County, N. Dak., and another above Wolfe Creek in the James River Valley, S. Dak.

A second party of seven men, under the leadership of Oscar L. Mallory, conducted test excavations at a large group of sites in Dewey County, along the right bank of the Missouri a short distance upstream from the mouth of the Moreau River. Site 39DW231, a small village on a terrace spur defended by two ditches, was tested extensively. A midden area, part of a circular house, and sections of the defensive system were exposed. Present evidence suggests that the principal occupation falls within the Chouteau Aspect and appears to be related to the Potts (39CD19) and No Heart (39AR1) villages of northern South Dakota.

A second fortified village, 39DW1, situated at the mouth of the Moreau River, was also tested. It differs from 39DW231 in that it lay on a higher terrace and was completely surrounded by a defensive ditch. The ceramic collections have much in common but apparently differences are such that they cannot be related on the focus level.

The remaining sites investigated, 39DW230, 39DW229, 39DW228, 39DW253, and 39DW254, were unfortified; pottery attributed to the La Roche horizon was usual. Portions of houses were excavated at 39DW228, 39DW229, and 39DW230. In each case the houses were circular with a central firepit and four central roof supports.

A number of additional sites were mapped or examined and a brief period was devoted to explorations at the Stelzer site. The latter is quite large, extending along the river for at least three-quarters of a mile. Mallory's tests were placed near the eastern end of the site. The pottery found here was identical to that found by Neuman's continuing excavations near the western edge. The Mallory party shared camp facilities with the Neuman crew, and returned to Lincoln on August 23 after 74 days in the field.

A third party of 12 men was directed by Dr. Alfred W. Bowers of the University of Idaho but temporarily attached to the Smithsonian Institution. The Bowers crew excavated at three small fortified village sites in the immediate vicinity of Mobridge, S. Dak. At the Red Horse Hawk site (39CO34), on the right bank of the Missouri, continuing work begun in the summer of fiscal year 1963, the excavation of 15 shallow circular houses was completed and the fortification ditch was tested in several places. This village, which is probably protohistoric, has produced a wealth of museum display specimens and is one of the two or three completely excavated sites within the Oahe Reservoir.

Work was also renewed at the Davis site (39CO14), a fortified village adjacent to the Red Horse Hawk site, continuing 1963 excavations. During the current season investigations were hampered by drought conditions which made the soil both intractable and "unreadable." With the use of a water wagon and power equipment, one lodge was completely excavated and the covering fill was removed from four others, but work could be carried no further.

The Davis site is an exceedingly important one because it appears to bridge the temporal gap between the rectangular and circular house complexes. The early component at the Davis site is distinctive in that lodges are placed within the bastions at the corners of the fortification, thus limiting the entrance passage to a narrow lane around the lodge.

Work was begun at the Larson site (39WW2), a small compact village on the left bank of the Missouri River south of Mobridge. The site consists of 29 circular depressions tightly clustered within an oval fortification ditch. Ten of the lodge depressions were trenched and two were completely excavated. The latter seem to have been rebuilt several times, but each new construction was smaller than the previous one. The most recent occupation seems to have been brought to an

end by the smallpox epidemic of A.D. 1780. There is no documentary evidence to this effect but human remains were strewn over the lodge floors. The skeletons of at least 30 individuals were exposed in one house, 8 in another, and there is evidence of additional skeletons in the remaining lodges. Since the deaths do not appear to have been due to violence, epidemic disease is inferred. In addition to the historic component or components at the Larson site, there are indications of an earlier Woodland occupation.

Bowers also conducted a limited survey along the now eroding banks of the Oahe Reservoir. A large collection of artifacts and bison bone was secured from the Rygh (39CA4) and Bamble (39CA6) villages where shoreline cutting has been extensive. Since the origin of these materials can be localized within the respective sites, they will be exceedingly useful for comparative studies. The party completed work on September 7 after 89 days in the field.

At the beginning of the fiscal year a field crew of five men, directed by Wilfred M. Husted, was excavating in the Yellowtail Reservoir along the Big Horn River of southern Montana and northern Wyoming. At the Mangus site (24CB221), a small rock shelter on the left bank of the river in Carbon County, Mont., three distinct occupation levels were found, the most recent of which was Late Prehistoric. A variety of artifacts was recovered here, including small triangular projectile points with and without side notches, stone knives, scrapers, fragments of sewn hide, cordage, and basketry. The middle zone carried obvious evidence of human use, but artifacts were too few to identify the nature of the occupation. The lowest level contained Agate Basin points, knives, scrapers and a mortar and pestle. Subsequently, a radiocarbon date of 1070 ± 70 B.P. (A.D. 880) was obtained from charcoal in a roasting pit found in the Late Prehistoric level, and two dates, 8690 ± 100 B.P. (6740 B.C.) and 8600 ± 100 B.P. (6650 B.C.) were secured from charcoal from the Agate Basin level.

Three other rock shelters in the vicinity, the Ledge site (24BH 252), the Greene site (24BH 253), and site 24BH255, all in Big Horn County, Mont., yielded artifacts of the Late Prehistoric Period. The Red Earth site (24BH251), another small shelter, contained a Late Prehistoric level, an unidentified occupation characterized by shallow, circular firepits, numerous small flakes, a mano and knife fragments.

Site 24BH 250, also in Big Horn County, Mont., was a small shelter with the entrance barricaded with rocks and juniper branches. A large fireplace outlined by rocks was intact on the surface, and below it was another containing burned stones and associated with a triangular projectile point.

A large, shallow, rock-filled firepit was excavated at site 24BH257, a small shelter formed by a large block fallen from the canyon wall.

Three corner-notched projectile points and several flakes were in association with the firepit. Until this site was excavated only simple triangular points or triangular points with side notches had been found with such firepits.

Three firepits, projectile points, scrapers, and a variety of worked flakes were found in tests at 24BH210, a large open site in Big Horn County. Two additional open sites, 24BH254 and 24BH259, were located in a badly eroded area, and tests showed that artifacts were restricted to the surface.

Site 24BH204 at the mouth of Porcupine Creek was tested but with negative results. Animal bone was abundant but it may have originated from gold camps that once operated at this location. Site 24BH214, about 1 mile above the mouth of Porcupine Creek, was only slightly more productive. Artifacts were limited to a corner-notched projectile point and a few scrapers.

Late in the season, the Husted party made exploratory tests at site 48BH217, in Big Horn County, Wyo., a short distance south of the Montana border. An Agate Basin point was found here in the course of land leveling for a cabin. Although tests were extensive, little of significance was recovered. The party completed its work on August 29 after 72 days in the field.

Another field party of nine men, under the direction of Lionel A. Brown, was working in the Pony Creek watershed in southwestern Iowa. A survey of the area added a number of new sites to the record, a number of tests were made, and five sites were excavated. Unfortunately, most of the endangered sites examined by the field party had been damaged in some degree by erosion or cultivation; nonetheless, architectural remains were found at four of them.

Two square houses were excavated at the Stonebrook Village (13ML219) and fragments of house floors were found at both the Downing (13ML218) and Steinheimer (13ML222) sites. The house structures ranged from 20 to 30 feet square, with deep vertical walls and entrances approaching 15 feet in length. The associated artifacts include ceramics of the Beckman and McVey series, clay effigies and pipe stems, side-notched projectile points, ovoid to triangular knives, planoconvex end scrapers, pecked and chipped celts, but surprisingly very little worked bone.

The Thomas site (13ML204) contained a mixture of pottery primarily representative of the Woodland horizon and the Central Plains Tradition. The rimsherd collection includes examples of Sterns Creek, Beckman Ware, Swoboda Ware, and one example classified as Anderson Low Rim. The primary feature at the site was a pit, 20 feet square, similar to house pits reported for the Woodland of eastern Nebraska.

The Lungren site (13ML224) is an archaic camp first noted at a depth of 10 feet below the surface in a high cutbank. The cultural deposit proved to consist of a narrow (ca. 2 inches thick) zone of charcoal-stained soil mixed with large quantities of chipping debris and bone fragments. The only projectile point recovered is side-notched with basal grinding. It is similar to those from the Long Creek site in Saskatchewan, the Logan Creek and Spring Creek sites in Nebraska, and the Simonsen and Hill sites in Nebraska. Other artifacts include triangular to ovoid knives, small planoconvex end scrapers, hammerstones, chipped celts and choppers. Bone artifacts were absent. Several midden areas and a basin-shaped firepit constitute the only nonartifact features of the deposit. The party completed work on August 30 after 81 days in the field.

A special field party consisting of a varying number of students directed by Dr. William M. Bass III, assisted by Walter Birkby, was working in the laboratory at the University of Kansas, Lawrence, Kans., at the beginning of the fiscal year. Dr. Bass was continuing a study of the human skeletal remains and burial patterns from the Sully site (39SL4) begun in 1957.

A total of 557 burials was excavated from the cemeteries at the Sully Village. This is the largest single sample from a site in the Plains. It is not likely to be equaled in the immediate future. If the ethnic affiliation of the site is substantiated, the sample provides a baseline for the study of the early historic Arikara population.

In addition to observations and metric analyses, the group tabulated data on burial orientation, burial goods, and grave types. At the same time, three members of the University of South Dakota medical staff examined the physical material to record the incidence of nose, throat, and ear diseases occurring the population. Bass completed his study on August 2 after 63 days of work.

A field party, consisting of a crew of two men under the leadership of Dr. Elden Johnson, of the University of Minnesota, but temporarily attached to the Smithsonian Institution, began work on June 22 surveying several small reservoirs in North Dakota. A single, very thin, habitation site (39BE1), was found at the James River damsite in Beadle County, S. Dak. Although the area was trenched extensively, the results were minimal. No additional sites were found within the proposed reservoir, but a number of local collections that originated in adjacent areas were examined. Since the James River Dam is part of the much larger Oahe Diversion Project, these collections will become important for future research when the larger project is activated.

The Garrison Diversion Project proposes construction of four major reservoirs and an extensive system of feeder canals within eastern

North Dakota. Archeological work during the current year was concentrated within the reservoir areas since the canal routes are not yet established. The Taayer Reservoir east of Oakes, N. Dak., is presently an open water slough. No sites were found to be endangered but a probable bison kill site (32SA1) was reported here in the 1930's when the reservoir was dry. A "stone ring" site (32SA2) was recorded by the survey party but it lies in the uplands outside of the reservoir. Hamburg Reservoir on the upper James River produced no sites. New Home Reservoir, in McLean County, N. Dak., east and south of the Garrison Dam, is in a long glacial drainage trench. Only a single site, 32ML212, was found here. It consisted principally of bison bone eroding from a cutbank but a number of chalcedony flakes were found in association.

The Lone Tree Reservoir, which will include the headwaters of the Sheyenne River, held a number of sites and others were found in the immediate vicinity. Probably the most significant within the reservoir is 32SH2, a large complex of boulder burial mounds. At least 14 mounds are included, and associated habitation sites are possible. The party completed its survey on September 20. Because work was intermittent, the field season totaled only 49 days.

A postseason (October 21–November 4) field party of two men, directed by Wilfred M. Husted, excavated at Fort Laramie National Historic Site, testing in four localities that will be affected by future expansion of visitor facilities. The remains of what is probably the Ward and Guerrier trading post were found, as well as evidences of an aboriginal occupation. The latter was far too scanty to even hazard an ethnic or archeological affiliation.

Late in September representatives of the Nebraska Game, Forestration and Parks Commission contacted the Missouri Basin Project concerning certain stone and pottery artifacts found during biological research in the Little Nemaha drainage of southeastern Nebraska. The artifacts examined by the Missouri Basin Project staff included materials suggesting the presence of Stearns Creek, Logan Creek, and Agate Basin complexes. On November 12, after the heavy summer vegetation was gone, Robert W. Neuman reexamined the area in company with Nebraska game biologists. Previous find spots were examined on Brownell Creek and Wolf Creek, but unfortunately the artifacts found to date have been secondary deposits and no true occupation sites were discovered.

Cooperating institutions working in the Missouri Basin at the beginning of the fiscal year included the University of Montana, the University of South Dakota, the University of Nebraska, the University of Missouri, and the Kansas State Historical Society.

Dr. Dee C. Taylor of the University of Montana continued the

shoreline survey of Fort Peck Reservoir of east-central Montana, locating archeological sites exposed by shoreline erosion. Robert Gant of the W. H. Over Museum, University of South Dakota, surveyed the shoreline of Lewis and Clark Lake (the former Gavins Point Reservoir). Dr. Preston Holder, assisted by James Marshall with a crew of students from the University of Nebraska, began salvage excavations in the Glen Elder Reservoir of northwestern Kansas. Several University of Missouri field parties, directed by Dr. Carl H. Chapman, excavated in the Kaysinger Bluff, Stockton, and Meramec Basin Reservoirs of Missouri. Each of these field parties operated under agreements with the National Park Service and the Smithsonian Institution in the Inter-Agency Salvage Program.

The 1964 field season began with two small survey teams examining sites in the upper Big Bend Reservoir. During the winter of 1964 the Missouri Basin Project staff had become aware that the waters behind the Big Bend Dam were rising faster than had been anticipated. Under the circumstances it was impossible to plan fieldwork for the approaching summer season without a close check on the changing conditions. On April 6 and 7, Richard E. Jensen and Oscar L. Mallory of the Project staff visited archeological sites along the left bank of the reservoir between Chapelle Creek and the city of Pierre. Severe weather conditions made it impossible to examine other areas, but as of that time water damage did not appear to be extensive. The reservoir level had reached a point just below many sites, and at least one, 39HU60 at Chapelle Creek, was then an island. Another reconnaissance was made by Jensen and Lionel A. Brown on May 7 and 8, but despite a slight interim rise of water level, the archeological situation had not changed significantly.

On June 9, a group of seven men directed by Wilfred M. Husted, began work in the Yellowtail Reservoir of Montana and Wyoming. This is the third and last season of excavation within the reservoir area. Previously, Smithsonian Institution field parties had concentrated in the lower and central parts of the reservoir. This year excavations are restricted to the upper Big Horn Canyon, thus completing the investigation of major sites within the reservoir. At the end of the fiscal year the crew was surveying within the upper reservoir.

On June 10 three additional field parties began work within the Big Bend Reservoir of central South Dakota. The first, a group of nine men directed by Richard E. Jensen, was carrying out large-scale testing at the Sommers site (39ST56) on the right bank of the Missouri adjacent to the La Roche sites. It is one of the most significant villages of the Middle Missouri Tradition surviving within the reservoir. The village contains at least 70 house depressions and has a particularly

thick mantle of debris. It is probable that two or more seasons of work will be required to secure an adequate sample from the site. As a consequence, the current excavations are exploratory, designed to provide an outline for further work. As of the end of the fiscal year, tests were underway in two long-rectangular houses in preparation for the use of power equipment to remove the heavy layer of overburden.

A second field party of 11 men, under the leadership of John J. Hoffman, was excavating at site 39ST17, a compact fortified village on the right bank of the Missouri near the mouth of Fort George Creek. The site is a relatively late one and probably can be attributed to the Arikara of the 18th century. Since the village is small, it is planned to excavate the entire occupied area. By the end of the fiscal year several tests were completed and a small circular house was exposed. Artifacts were few but indicate an affiliation with the Phillip Ranch site. The Hoffman and Jensen parties shared a camp near Fort George Creek, only a short distance from 39ST17.

A third party, consisting of eight men, directed by Lionel A. Brown, was working at the Chapelle Creek site, 39HU60, continuing excavations begun during the summer of 1963. A considerable amount of material has already been excavated from the site, but much of it is inconclusive. The purpose of the Brown party is to find the necessary relationships essential to bring the previous work into focus. At the end of the fiscal year the ravages of the past winter had been repaired and excavation of a shallow earth lodge of the historic period was well underway.

On June 22, a party of three men under the leadership of David T. Jones, temporarily attached to the Smithsonian Institution, was surveying, mapping, and testing the sites remaining within the upper Big Bend Reservoir. The results of the survey will be used as a basis for selecting the sites to be investigated during the next (and probably final) year of work within the reservoir.

On June 15, two field parties, one under the general direction of Robert W. Neuman, with field supervision by Oscar L. Mallory, and the other under Mallory's direction, began work in the Oahe Reservoir. The first, consisting of nine men, was excavating at the Stelzer site (39DW242) near Mobridge, S. Dak., continuing the excavations of 1963. The second party of eight resumed work at site 39DW231, a multicomponent, fortified village first tested last year. By the end of the fiscal year both groups had removed the overwinter slumpage and had begun the excavation of a number of habitation features.

A third party of 12 men, working under the direction of Dr. Alfred W. Bowers, began excavations in the Mobridge area of the Oahe Reservoir on June 17. The Bowers party was to complete the investigation of the Red Horse Hawk (39CO14) and Larson (39WW2) sites begun during earlier field seasons. At the end of the fiscal year the

fill had been removed from several houses and a large cut had been made across the defensive ditch.

A final field party of two men, under the direction of G. Hubert Smith, conducted a survey of historic sites in the Big Bend, Oahe, and Fort Randall Reservoirs from June 23 to 28. As was the case with the aboriginal sites, high water within the reservoirs has become a threat to previously undamaged historic sites. The Smith party examined a number of sites, made a photographic record of sites now destroyed or in the process of destruction, and secured data necessary for future work.

There were seven cooperating institutions working within the Missouri Basin at the end of the fiscal year. The St. Paul Science Museum completed a survey of the Bowman-Haley Reservoir of northwestern South Dakota and in late May and in early June began a shoreline reconnaissance of the Garrison Reservoir in North Dakota. In both instances the field parties were directed by Vernon R. Helmen. University of Missouri field parties, under the direction of Dr. Carl F. Chapman, were surveying and excavating in the Stockton and Kay-singer Bluff Reservoirs in Missouri, continuing the work of past seasons. University of Nebraska parties, directed by Dr. Preston Holder, were excavating in the Glen Elder and Milford Reservoirs of northwestern Kansas. A State University of South Dakota group, led by Dr. James H. Howard, was continuing investigations within the Lewis and Clark Lake area along the border of South Dakota and Nebraska. A field group of the State Historical Society of North Dakota, under the direction of Dr. Donald J. Lehmer, was excavating at the Fire Heart Creek Village (32SI2) in the Upper Oahe Reservoir of southern North Dakota. A field party of the Kansas State Historical Society, under the general direction of Thomas A. Witty, was excavating in the Council Grove Reservoir of eastern Kansas, and a field group from Iowa State University, directed by David Gradwohl, was excavating in the Red Rock Reservoir of central Iowa.

During the period that the Missouri Basin Project archeologists were not in the field, they were engaged in analyses of their materials and in laboratory and library research. They also prepared manuscripts of technical reports and wrote articles of a popular nature. In addition to the regular staff, Dr. Alfred W. Bowers, of the University of Idaho; Dr. William M. Bass, of the University of Kansas; and Dr. Elden Johnson, of the University of Minnesota, joined the Missouri Basin Project to complete short-term laboratory and field research assignments. Dr. Bowers again became a temporary staff member on June 17, and David T. Jones, West Nottingham Academy, Maryland, on June 22. Both were on duty through the end of the fiscal year.

By the end of the fiscal year the Missouri Basin Chronology Program has been in operation 6½ years. The cooperation of other institutions and individuals within the anthropological profession continued as in the past. Dendrochronological research has been much reduced because personnel were lacking. However, some new material was studied and plans have been completed for a renewed attack during the coming year. The carbon-14 section continued to progress with the addition of 15 new dates. Eight dates, from three sites, apply to villages of both the Middle Missouri and Coalescent Tradition of the Big Bend Reservoir, central South Dakota. Three additional dates derive from two sites, a group of burial mounds and a late fortified village, in the Oahe Reservoir of northern South Dakota. The remainder date various preceramic horizons from a stratified site in the Yellowtail Reservoir, Mont. The Missouri Basin Chronology Program continued to use the facilities of Isotopes, Inc., as well as those of the division of radiation and organisms of the Smithsonian Institution.

The laboratory and office staff of the Missouri Basin Project devoted most of its effort during the year to the processing of materials for study, preparing specimen records, typing, filing, and illustrating records and manuscripts. The accomplishments of the laboratory and office staff are listed in tables 1 and 2.

During the first quarter, Dr. Robert L. Stephenson, chief, devoted most of his time to the overall management of the Missouri Basin Project, including the office and laboratory in Lincoln and the several field parties. He devoted a portion of his time to laboratory analysis of materials he had excavated in previous years. His report, "The Accokeek Creek Site: A Middle Atlantic Seaboard Culture Sequence," was published by the University of Michigan, and he submitted several book reviews for publication. Until September 30, when he assumed his new duties as assistant director of the River Basin Surveys in Washington, D.C., he continued to serve as chairman of the Missouri Basin Chronology Program, as assistant editor of "Current Research" in the Plains area for *American Antiquity*, and as editor of the *Plains Anthropologist*.

Dr. Warren W. Caldwell worked in the laboratory through the first quarter, analyzing materials excavated in the previous two field seasons. A substantial portion of a manuscript entitled, "The Grand Detour Phase: Early Village Sites in the Big Bend Reservoir, South Dakota" (with Richard E. Jensen) was completed by September 30, at which time Dr. Caldwell assumed the duties of Chief of the Missouri Basin Project. During the remainder of the year, Dr. Caldwell devoted a substantial portion of his time to the management of the Project, to budgetary matters, and to the planning of the forthcoming field

TABLE 1.—*Specimens processed July 1, 1963, through June 30, 1964*¹

Reservoir	Number of sites	Catalog numbers assigned	Number of specimens processed
Almena	1	1	2
Angus	2	19	60
Big Bend	18	5, 008	39, 993
Fort Scott	6	67	67
Garnett	7	62	64
Garrison Diversion Project	7	32	166
Gavins Point	1	66	527
James Diversion Project	1	11	22
Oahe	18	5, 852	29, 141
Pony Creek	14	1, 025	4, 590
Round Mound	2	13	16
Tuttle Creek	9	2, 806	15, 943
Yellowtail	22	1, 870	5, 072
Sites not in a reservoir	2	22	68
Total	110	16, 854	95, 731
Collections not assigned site numbers	6	7	20
Grand total	116	16, 861	95, 751

¹ As of June 30, 1964, the Missouri Basin Project has cataloged 1,485,104 specimens from 2,250 numbered sites and 66 collections not assigned site numbers.

Specimens restored included 2 pottery vessels and 5 vessel sections.

Specimens donated to the Missouri Basin Project included ca. 100 rim sherds and 1 vessel section from the Swan Creek site (39WW7) (donated by the South Dakota State Museum, University of South Dakota), 15 projectile points from the Rinehardt Buffalo Kill No. 2 (24LT00) (donated by Carle Leavitt of Conrad, Mont.), a surface collection from 39YK203 (donated by George Kostal and Ansel Petersen, civil engineers at the Gavins Point Dam), and a collection of pottery sherds from the Southwest (donated by Dr. Frank H. H. Roberts).

Specimens collected at Fort Laramie, Wyo., were cleaned but not cataloged by the Missouri Basin Project.

TABLE 2.—*Record material processed, July 1, 1963, through June 30, 1964*

MISSOURI BASIN PROJECT

Reflex copies of records	6, 563
Photographic negatives made	1, 299
Photographic prints made	7, 169
Photographic prints mounted and filled	4, 625
Transparencies mounted in glass	1, 507
Kodachrome pictures taken in lab	180
Cartographic tracings and drawings	50
Illustrations	74
Lettering of plates	49
Profiles drawn	14
Plate layouts made for manuscripts	64

season. In addition, he continued to work with Jensen on the "Grand Detour Phase" manuscript and prepared a monograph, "Archeological Salvage Investigations in the Hells Canyon area, Snake River, Oregon and Idaho," for publication by the Bureau of American Ethnology. During the year several papers of which Dr. Caldwell was author or co-author were published. These include "Excavations in the Lower Big Bend Reservoir, South Dakota," *Plains Anthropologist*, vol. 8, No. 20, p. 118; "Taxonomy Revisited," *Plains Anthropologist*, vol. 8, No. 20, pp. 84-85; (with G. Hubert Smith) *The Oahe Reservoir: Archeology, Geology, History*, U.S. Army Corps of Engineers, Omaha, pp. 1-44; (with Lee G. Madison and Bernard Golden) "Archeological Investigations at the Hickey Brothers Site (39LM4), Big Bend Reservoir, Lyman County, South Dakota," *River Basin Surveys Papers No. 36, Bureau of American Ethnology, Bulletin 189*, pp. 267-290; "Fortified Villages in the Northern Plains," *Plains Anthropologist*, vol. 9, No. 23, pp. 1-7.

At the 20½ Plains Conference held at Pierre, S. Dak., on July 20 Dr. Caldwell spoke on the problem of the firearms trade and Plains archeology. He also attended the Governors' Conference for the Lewis and Clark Reenactment Pageant at Camp Ashland on November 19 and presented a brief statement regarding the potential contribution of the Missouri Basin Project to region-wide recreational planning. On September 6 and 7 he participated in the joint Plains-Pecos Conference at Fort Burgwin, near Taos, N. Mex., and spoke on "The LaRoche Problem." He also attended the meetings of the Committee for the Recovery of Archeological Remains, in Washington, D.C., on February 12 and 13; the 74th Meeting of the Nebraska Academy of Sciences, Lincoln, May 1 and 2; and the annual meeting of the Montana Archeological Society, Havre, May 16 and 17. At the last-named he presented a paper, "The Northwestern Plains and the Missouri River Basin," and participated in a panel discussion of Plains archeological problems. He continued to serve as dendrochronology chairman of the Missouri Basin Chronology Program and, until December, as contributing editor for reviews for the *Plains Anthropologist*. As of that time he replaced Dr. Stephenson as editor of the journal and continued in that capacity through the year. Dr. Caldwell participated in the Visiting Scientist Program of the Nebraska Academy of Sciences, speaking before student groups at Utica, Nebr., on January 8. In addition, he presented talks or lectures to eight civic and university groups. In October he was named as one of the organizers for the Plains Field Conference preceding the 1965 INQUA meeting at Boulder, Colo. During the period of September to June he continued to serve, on annual leave, as part-time assistant professor of anthropology at the University of Ne-

braska, and in January he was elected to the Graduate College. At the end of the year Dr. Caldwell was in the Lincoln office continuing his administrative duties.

Lionel A. Brown, archeologist, when not in the field, devoted his time to laboratory study and reporting of materials from his 1962 and 1963 surveys and excavations. In addition, he assumed responsibility for a portion of the backlog of unreported sites contained in the Missouri Basin Project files. During the spring Mr. Brown made a preliminary analysis of the specimens excavated from the Chapelle Creek Village (39HU60) during the 1963 season as a guide to further work at the site. A manuscript entitled "Archeological Investigations in the Lower Yellowtail Reservoir, Montana," was rewritten in second draft. Another, a comprehensive report, "Archeological Investigations in the Pony Creek Watershed, Iowa," was in rough draft form, and "The Gillette Site (39ST23), Oahe Reservoir, South Dakota," was in near final form. During the year his survey report, "An Appraisal of the Archeological and Paleontological Resources of Six Reservoir Areas in Kansas and Nebraska," was issued for limited distribution. Two brief field reports, "Survey of the Pony Creek Watershed, Iowa," and "Archeology of the Lower Yellowtail Reservoir, Montana," (*Plains Anthropologist*, vol. 8, No. 20, p. 117, and vol. 8, No. 20, p. 119, respectively) and two articles "The Fort Smith Medicine Wheel, Montana" and "A Crow Lodge Frame" were published in the *Plains Anthropologist* (vol. 8, No. 22, pp. 225-230, 273-274, respectively). Another, "The Lungren Site: An Archaic Manifestation in Southeastern Iowa," appeared in abstract in the *Proceedings of the 74th Annual Meeting of the Nebraska Academy of Sciences*, Lincoln (p. 3). On May 24, at the annual meeting of the Iowa Archeological Society, he presented a summary of recent work in southwestern Iowa, and on the 25th he made a brief survey of sites in the Rathbun Reservoir of south-central Iowa. At the end of the year Mr. Brown was again in the field engaged in archeological excavations at the Chapelle Creek site, S. Dak.

John J. Hoffman, archeologist, when not in the field, devoted most of his efforts to the laboratory analysis and preparation of reports, based upon materials excavated during his field work of the past two years. In addition, he has undertaken a reanalysis of certain pottery collections that have been previously described in the literature to bring them into accord with current concepts. A large site report, "Molstad Village: A Fortified Site in the Oahe Reservoir, South Dakota," was completed in first draft, and a shorter paper reexamining a number of late prehistoric and early historic sites in the Mobridge area, South Dakota, and an analysis of materials from the La Roche sites are under way. Previous studies of Mr. Hoffman's, published

during the year, include "Temporal Ordering and the Chouteau Aspect," *Plains Anthropologist*, vol. 8, No. 20, pp. 91-97; "Prehistoric Houses Along the Middle Missouri River," *Progress*, Oct.-Dec., 1963, *Missouri Basin Field Committee*, Billings, pp. 48-57; "Investigation of the Swift Bird House (39DW233) in the Oahe Reservoir, South Dakota," *Plains Anthropologist*, vol. 8, No. 22, pp. 249-256; a field report, "Excavations at Molstad Village in the Oahe Reservoir," *Plains Anthropologist*, vol. 8, No. 20, pp. 118-119; and two short book reviews also published in the *Plains Anthropologist*.

Mr. Hoffman served as chairman of the 20½ Plains Conference at Pierre on July 20, which he reported briefly in the *Plains Anthropologist*, vol. 8, No. 22, p. 262. He also participated in the joint Plains-Pecos meeting at Taos, N. Mex., September 6-7, where he presented a paper entitled, "La Roche: Some New Data," and attended the annual meeting of the Montana Archeological Society at Havre, May 16 and 17. He also spoke before several school and civic groups in Nebraska and Iowa. At the end of the year Mr. Hoffman was again in the field engaged in archeological excavations in the Big Bend Reservoir of South Dakota.

Wilfred M. Husted, archeologist, when not in the field, prepared reports, based upon materials excavated during his 1963 field investigations, and continued to work on the backlog of site collections from the Missouri Basin Project files. A manuscript report entitled "Archeological Test Excavations at Fort Laramie National Historic Site, Wyoming, 1963" was completed and accepted by the U.S. National Park Service, Midwest Region. A final draft of "The Bice Site (39LM31) and the Clarkstown Site (39LM47): Salvage Excavations in the Fort Randall Reservoir, South Dakota" was completed, and major drafts of three as yet untitled reports dealing with sites in the Big Bend and Fort Randall Reservoirs are substantially finished. Mr. Husted submitted two papers, "Early Occupation of the Colorado Front Range" and "Pueblo Pottery from Northern Colorado," for publication, and two short reports, "Investigations in the Upper Yellowtail Reservoir, Montana and Wyoming" and "A Rock Alignment in the Colorado Front Range," were published in the *Plains Anthropologist* (vol. 8, No. 20, p. 119, and vol. 8, No. 22, pp. 221-224, respectively). At the end of the year he was in the field excavating sites in the Yellowtail Reservoir of Wyoming and Montana.

Richard E. Jensen, archeologist, when not in the field, worked primarily on the analysis and reporting of site collections excavated by staff members in previous years, but following the death of Dean E. Clark, laboratory supervisor, he assumed direction of the processing and cataloging staff in addition to his regular duties. He cooperated with Dr. Caldwell in the preparation of a major study entitled, "The

Grand Detour Phase: Early Village Sites in the Big Bend Reservoir, South Dakota," and completed a first draft of "The Peterson Site (39LM215), An Earth Lodge Village in the Big Bend Reservoir." A study concerned with recent work in the Big Bend Reservoir, "A Temporal Ordering of Several Rectangular House Occupations in Central South Dakota" (abstract), was published in the *Proceedings of the 74th Annual Meeting of the Nebraska Academy of Sciences*, Lincoln, 1964, p. 4. On July 20, Mr. Jensen attended the 20½ Plains Conference at Pierre, S. Dak., where he reported the progress of his fieldwork. He also participated in the Plains-Pecos meeting at Taos, N. Mex., presenting a brief paper entitled, "Notes on the Archeology of the Big Bend Area." At the end of the year he was in the field excavating at the Sommers site in the Big Bend Reservoir.

Oscar L. Mallory, archeologist, when not in the field, continued the analysis and reporting of materials that he excavated or collected in previous field seasons. A reconnaissance report, "An Archeological Appraisal of the Missouri Breaks Region in Montana," was completed and issued for limited distribution, and a short note entitled "Survey of the Missouri Breaks Region, Montana," summarizing the work, was published in the *Plains Anthropologist* (vol. 8, No. 20, p. 120). In addition, Mr. Mallory completed a detailed study of the artifacts from the Mouat Cliff Burials (24TE401), Mont., which will be a part of a larger study of the excavations carried out by members of the Billings Archeological Society. Another manuscript concerned with a group of sites in the vicinity of the Moreau River, Oahe Reservoir, is well under way. At the end of the year Mr. Mallory was in the field excavating sites in the Oahe Reservoir.

Robert W. Neuman, archeologist, when not in the field, devoted most of his time to the analysis and reporting of data resulting from his excavations during previous field seasons. He has begun a major monograph concerned with early burial mound complexes in the northern Plains. He has also completed an article entitled "Projectile Points from Preceramic Occupations near Fort Thompson, South Dakota," which has been accepted by the *Plains Anthropologist*, and, in addition, a number of Mr. Neuman's research papers, most of which were written during the current year, were published. These include: "Check-stamped Pottery on the Northern and Central Great Plains," *American Antiquity*, vol. 29, No. 1, 1963, pp. 17-26; "Field Work in Dewey County, South Dakota, Oahe Reservoir Area," *Plains Anthropologist*, vol. 8, No. 20, pp. 121-122; "Archeological Salvage Investigations in the Lovewell Reservoir Area, Kansas," *River Basin Surveys Papers No. 32, Bureau of American Ethnology Bulletin 185*, pp. 257-306; (with Carl R. Kindle and Larry A. Witt) "Prehistoric Artifacts from the Little Nemaha River Drainage, Otoe County, Nebraska,"

Plains Anthropologist, vol. 9, No. 23, pp. 22-28; "The Good Soldier Site (39LM238), Big Bend Reservoir, Lyman County, South Dakota," *River Basin Surveys Papers No. 37, Bureau of American Ethnology Bulletin 189*, pp. 291-318.

Mr. Neuman attended the 20½ Plains Conference in Pierre, S. Dak., July 20, the annual meeting of the Nebraska Academy of Sciences, Lincoln, May 1 and 2, and the meeting of the Society for American Archeology, Chapel Hill, N.C., May 7-9, where he presented a paper on "A Woodland Camp and Burial Mound Complex in Dewey County, South Dakota." He continued to serve as chairman of the Radiocarbon Section of the Missouri Basin Chronology Program, was appointed assistant editor for current research (Plains area) for *American Antiquity*, and contributing editor for Plains facts for the *Plains Anthropologist*. Mr. Neuman participated in the Visiting Scientist Program of the Nebraska Academy of Sciences, speaking before school groups at Eddyville, Nebr., and he also presented an illustrated talk to the National Professional Geographical Fraternity at the University of Nebraska. At the end of the year Mr. Neuman was at work in the Lincoln laboratory.

G. Hubert Smith, archeologist, when not in the field, was concerned with the preparation of reports based upon his previous work at several historic sites. By the end of the year he had completed a comprehensive report on investigations by the Missouri Basin Project and the State Historical Society of North Dakota at the sites of Like-A-Fishhook Village and Fort Berthold I and II (32ML2), in the Garrison Reservoir area, North Dakota. In addition, he had made substantial progress on reports of excavations of Fort George (39ST202) and 39HU301, in the Big Bend Reservoir of South Dakota and had begun preparation (with Caldwell and others) of the booklet "The Big Bend Reservoir: Archeology and History," to be published by the U.S. Army Corps of Engineers. An article written by Mr. Smith, "Archeological Explorations at Fort McHenry, 1958," was published in the *Maryland Historical Magazine* (vol. 58, No. 3, pp. 247-250), and a brief note, "Excavations at Fort George, South Dakota," appeared in the *Plains Anthropologist* (vol. 8, No. 20, p. 122).

On July 20 he took part in discussions of northern Plains ethnohistory, at the 20½ Plains Conference at Pierre, S. Dak. At the Plains-Pecos meeting at Taos, N. Mex., on September 6 and 7, he reported recent investigations at historic sites within the Missouri Basin reservoir areas. During the period October 24-30 he examined historic sites in Missouri at the request of Dr. Carl H. Chapman and other University of Missouri staff members. On October 28 Mr. Smith addressed the annual meeting of the Missouri Archeological Society at Columbia, Mo., and that evening spoke before the Big Bend chapter of the

Society at Marshall, Mo. On April 10, he presented an illustrated lecture, "Archeological Salvage within the Missouri Basin," before the annual meeting of the Minnehaha County Historical Society at Sioux Falls, S. Dak., and on May 2 he read a paper entitled "The Viking Site in Newfoundland" before the anthropological section of the Nebraska Academy of Sciences (published in abstract in the *Proceedings of the 74th Annual Meeting of the Nebraska Academy of Sciences*, Lincoln, p. 5). In April Mr. Smith became contributing editor for reviews for the *Plains Anthropologist*. At the end of the year he was at work in the Lincoln Laboratory of the Missouri Basin Project.

Virginia.—Carl F. Miller, at the beginning of the fiscal year, had an excavation crew at work on the Hales Ford site (44FR14) in the Smith Mountain Reservoir area near Rocky Mount in southern Virginia. He completed the work at this site on July 2, having excavated 144 archeological features and recovered various tool types, burial patterns and offerings, and, of particular interest, a series of bone flutes that suggested much in the way of social life of these Early to Middle Woodland Indians. The power screen was used during these excavations, making possible a nearly complete recovery of the cultural remains.

Mr. Miller and his crew of five men moved to the Booth Farm site (44FR15) on July 2, and between then and July 28, when the field work ended, they excavated 202 archeological features. A number of Savannah projectile points of the Late Archaic and Early Woodland Periods were found lying on sterile hardpan at the base of the site and in association with several random post molds. Noteworthy were the remains of 70 feet of stockade found at the south edge of the site. In this stockade, posts had been placed at intervals and reinforced with rocks in the postholes. Wooden stringers had connected the vertical posts, and to these had been attached other posts, much as a modern fence would be built.

Idaho-Oregon.—Under an agreement with the Smithsonian Institution, the Idaho State University Museum continued the work on the Hells Canyon Reservoir material that was excavated during the latter part of last fiscal year. The project, under the direction of Dr. Earl H. Swanson, director of the Museum, was continued by Max G. Pavesic, a graduate student at the University of Colorado. Work was confined largely to laboratory analysis of the excavated material, rechecking a few of the field locations, and preparation of the report.

ARCHIVES

Mrs. Margaret C. Blaker continued her duties as archivist, assisted until August 1 by Regina M. Solzbacher and for the remainder of the fiscal year by Margaret V. Lee.

An extensive series of photographic prints and lantern slides, made

in the 1880's and 1890's and showing Indian students at Hampton Institute, as well as views made on a number of western reservations, was borrowed from the Huntington Memorial Library of Hampton Institute, Hampton, Va. Approximately 400 copy negatives were made from this loan collection and are now in the Bureau's active files.

Over 150 photographs of Osage Indians, including many full-length portraits of individuals in native costume taken in the 1880's and 1890's in the studios of G. W. Parsons and J. M. Fowler of Pawhuska, Okla., were received on loan from the Osage Tribal Museum, Pawhuska, Okla. in May and are currently being copied.

Approximately 100 glass plate negatives exposed by Dr. Robert Charles Gebhardt in the period 1900-1907, showing Indians on the streets of Black River Ralls, Wis., and their homes and burial grounds near the cranberry marshes outside the town, were acquired from the photographer's son, Paul Gebhardt of Towson, Md.

Thirty photographs of Florida Seminole Indians, and Seminole camps, boats, and agricultural scenes, made in 1910-11 by Lorenzo D. Creel, special agent, were copied from Creel's manuscript report in the National Archives.

Thirteen studio and outdoor photographs of Winnebago Indians taken in the period from the 1870's to about 1900 by H. H. Bennett, pioneer photographer of Kilbourn, Wis., now Wisconsin Dells, were acquired from the Bennett Studio in Wisconsin Dells. This studio and its files of glass negatives of persons, places, and events in the Wisconsin Dells area in the period 1865 to 1907 is now maintained by the photographer's daughters, Miss Miriam Bennett and Mrs. Ruth Bennett Dyer.

Three original prints from negatives made about 1899 in the vicinity of Chadron, Nebr., by Ed Edson were received from Dr. R. W. Breckinridge, through the Lincoln, Nebr., office of the River Basin Surveys. They are portraits of Red Cloud and Little Wound, Oglala Dakotas, and a view of a Sioux camp near Chadron, Nebr.

Individual portraits of five Sioux Indians, taken in 1899 by Robert Gish Parker of Chicago, were donated by a nephew of the photographer, Mr. Leslie B. Taylor of Miami, Fla. The photographs include a portrait of the famous show Indian, Iron Tail.

Four negatives made by Dr. Francis Harper on the Poosepatuck Reservation, Mastic, Long Island, in 1909 were donated by Dr. Harper and filed with related negatives previously donated by him.

A group of 10 photographic reproductions on postcards were donated by Philip Sampson of Arlington, Va. They included a full-length portrait as well as front and profile bust portraits of the Kaw (Kansa) chief Washunga, taken about 1880.

Eugene Heflin of Reedsport, Oreg., submitted an account of his

attempts to salvage skeletons and artifacts from the site of the historic village of Shet-le-shin, on Pistol River, southwest Oregon. This site has now been destroyed by road construction. A microfilm copy of Mr. Heflin's account, which included news clippings, photographs and pen-and-ink drawings, was made and the original returned to him.

A Micmac vocabulary and grammatical notes recorded by P. L. Muschamp while he was a graduate student at Yale University were deposited by Mr. Muschamp. Unfortunately Mr. Muschamp's more extensive notes on his Micmac fieldwork had been lost in a fire that destroyed his home a number of years ago. These notes are on $3 \times 5''$ slips and occupy one file box.

EDITORIAL WORK AND PUBLICATIONS

The editorial work of the Bureau continued during the year under the immediate direction of Mrs. Eloise B. Edelen, assisted by Mrs. Phyllis W. Prescott and Miss Susan Colby. The following publications were issued:

Eightieth Annual Report of the Bureau of American Ethnology, 1962-1963, ii+34 pp., 2 pls. 1964.

Bulletin 178. Index to Bulletins 1-100 of the Bureau of American Ethnology, with index to contributions to North American Ethnology, introductions, and miscellaneous publications, by Biren Bonnerjea. vi+726 pp. 1963.

Bulletin 186. Anthropological Papers, Nos. 63-67. iv+310 pp., 60 pls., 35 figs., 2 maps. 1963.

- No. 63. Tarqui, an early site in Manabí Province, Ecuador, by Matthew W. and Marion Stirling.
- No. 64. Blackfoot Indian pipes and pipemaking, by John C. Ewers.
- No. 65. The Warihio Indians of Sonora-Chihuahua: An ethnographic survey, by Howard Scott Gentry.
- No. 66. The Yaqui deer dance: A study in cultural change, by Carleton Stafford Wilder.
- No. 67. Chippewa mat-weaving techniques, by Karen Daniels Petersen.

Bulletin 187. Iroquois music and dance: Ceremonial arts of two Seneca Long-houses, by Gertrude P. Kurath. xvi+268 pp., 3 pls., 164 figs. 1964.

Bulletin 189. River Basin Surveys Papers, Nos. 33-38, Frank H. H. Roberts, Jr., editor. xiv+406 pp., 58 pls., 66 figs., 13 maps. 1964.

- No. 33. The Paul Brave site (32SI4), Oahe Reservoir area, North Dakota, by W. Raymond Wood and Alan A. Woolworth.
- No. 34. The Demery site (39CO1), Oahe Reservoir area, South Dakota, by Alan R. Woolworth and W. Raymond Wood.
- No. 35. Archeological investigations at the Hosterman site (39PO7), Oahe Reservoir area, Potter County, South Dakota, 1956, by Carl F. Miller.
- No. 36. Archeological investigations at the Hickey Brothers site (39LM4), Big Bend Reservoir, Lyman County, South Dakota, by Warren W. Caldwell, Lee G. Madison, and Bernard Golden.
- No. 37. The Good Soldier site (39LM38), Big Bend Reservoir, Lyman County, South Dakota, by Robert W. Neuman.
- No. 38. Archeological investigations in the Toronto Reservoir area, Kansas, by James H. Howard.

Bulletin 190. *An ethnography of the Huron Indians, 1615-1649*, by Elisabeth Tooker. iv+184 pp. 1964.

Publications distributed totaled 35,314 as compared with 17,722 for the fiscal year 1963.

ILLUSTRATIONS

Throughout the year, E. G. Schumacher, the staff artist for the Bureau of American Ethnology, prepared and executed many varied illustrations in the fields of ethnology and archeology, to appear in Bureau publications. The bulk of the art work concerned the retouching and/or restoration and assembling of photographs, the drawing of maps, charts, diagrams, graphs, and sundry text figures. Mr. Schumacher also performed miscellaneous assignments for other units of the Smithsonian Institution, including the Editorial and Publications Division.

MISCELLANEOUS

Dr. M. W. Stirling and Sister Inez Hilger continued as research associates of the Bureau. Dr. A. J. Waring, formerly research associate, died on March 21, 1964. Mrs. Phyllis W. Prescott, who had assisted in editing many of the Bureau publications, died on June 12, 1964, after a brief illness.

The Bureau continued its extensive service to scholars, teachers, students, and the interested layman in providing information on technical questions, bibliographies, and leaflets on special topics relating to the American Indian.

Specialists on the Bureau staff identified and supplied information on many specimens, both ethnological and archeological, which were brought in or received by mail.

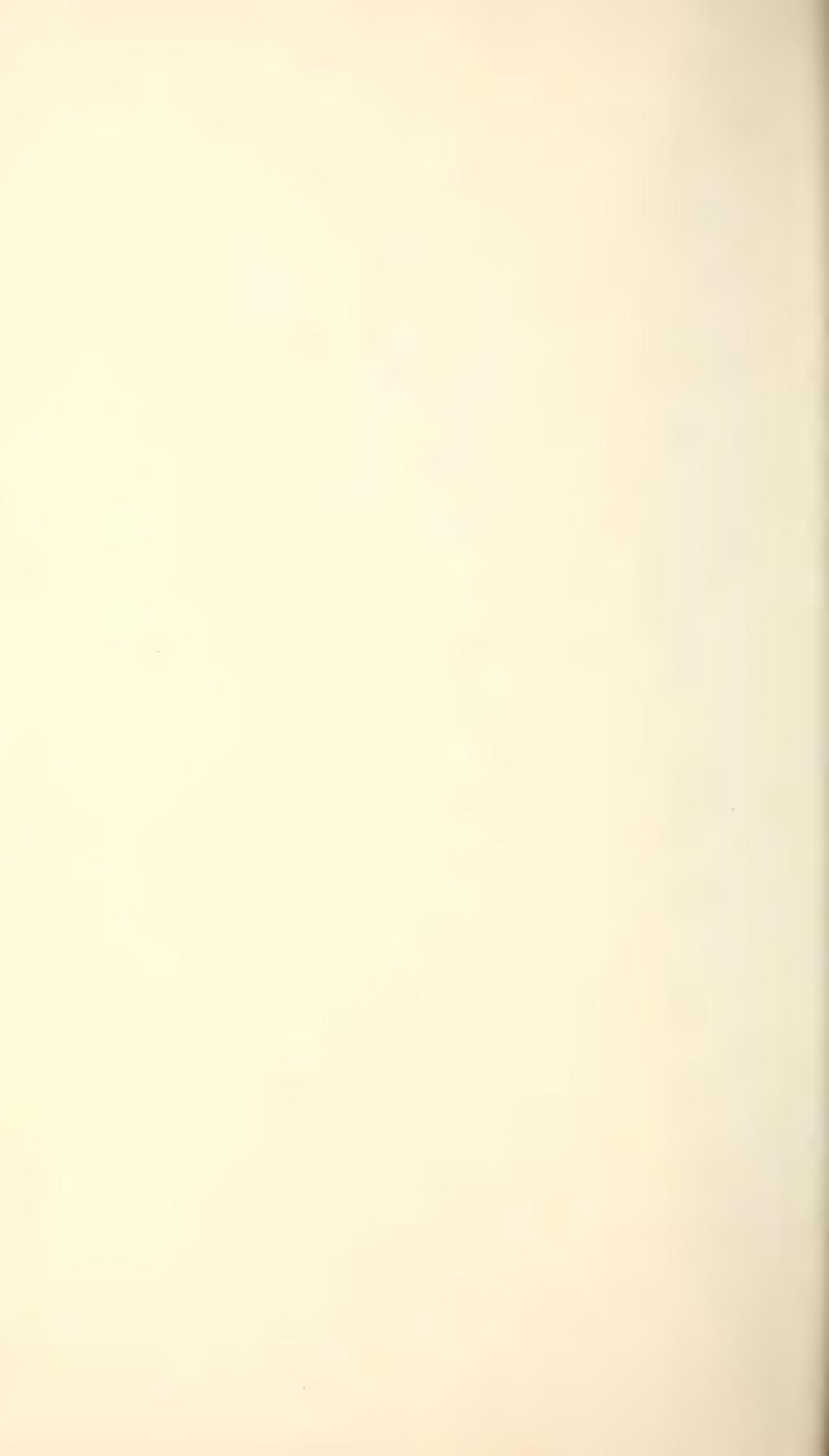
Respectfully submitted.

HENRY B. COLLINS, *Acting Director.*

S. DILLON RIPLEY,

Secretary, Smithsonian Institution.











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